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ABSTRACT

DATA ARE PRESENTED CONCERNING THE TOTAL NUMBER OF CHILDREN SERVED IN PSYCHIATRIC FACILITIES AND THE UTILIZATION OF SPECIFIC FACILITIES, INCLUDING OUTPATIENT PSYCHIATRIC CLINICS, STATE AND COUNTY MENTAL HOSPITALS, PRIVATE MENTAL HOSPITALS, INPATIENT PSYCHIATRIC SERVICES OF GENERAL HOSPITALS, PSYCHIATRIC DAY-NIGHT SERVICES, PRIVATE PSYCHIATRIC PRACTICE, AND COMMUNITY MENTAL HEALTH CENTERS. SPECIAL STUDIES ON UTILIZATION TRENDS ARE PROVIDED IN THE FIELDS OF SERVICES IN SMALL GEOGRAPHICAL AREAS AND THE RELATIONSHIPS OF HOUSEHOLD FACTORS TO PATTERNS OF CARE FOR MENTAL ILLNESS. ADDITIONAL DATA DESCRIBE THE USE OF NONPSYCHIATRIC RESOURCES. THE FOLLOWING ARE ALSO DISCUSSED AND THEIR IMPLICATIONS CONSIDERED: SEX DIFFERENCES, DIFFERENCES IN UTILIZATION PATTERNS AMONG PSYCHIATRIC FACILITIES, PATTERNS OF LIVING ARRANGEMENTS AND HOUSEHOLD COMPOSITION, SUICIDE, IMPACT OF FEDERAL AND STATE PROGRAMS ON PATTERNS OF CARE AND LENGTH OF STAY IN INPATIENT FACILITIES, AND CURRENT AND PROJECTED MENTAL HEALTH PROGRAM NEEDS. (RD)

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UTILIZATION OF PSYCHIATRIC FACILITIES BY CHILDREN:

CURRENT STATUS, TRENDS, IMPLICATIONS

ANALYTICAL AND SPECIAL STUDIES REPORTS

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UTILIZATION OF PSYCHIATRIC FACILITIES BY CHILDREN: CURRENT STATUS, TRENDS, IMPLICATIONS

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SYMBOLS USED

Data not available	—
Category not applicable	...
Quantity zero	-
Quantity more than 0, but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

Tables (other than appendix tables) and figures referred to in the text, will be found at the end of each major division of the text.

INTRODUCTION

During the last two decades, significant changes have occurred in the administration of mental health programs on local, State, and national levels and in the development of treatment and rehabilitation methods. Administrative changes were largely supported by Federal legislation which includes: the National Mental Health Act, resulting in a rapid growth in outpatient psychiatric clinics and the concurrent establishment of inpatient psychiatric services in a number of general hospitals (1); the 1963 Mental Retardation Facilities and Community Mental Health Centers Construction Act, providing construction funds for community-based mental health facilities to include inpatient, outpatient, day care and emergency services, and the 1965 legislation, providing funds for staffing these centers (2, 3); and most recently, the Social Security Amendments of 1965 (PL 89-97) providing funds for care and treatment of the elderly mentally ill and for research grants for mental and emotional illness in children (4).

While legislation fostered the development of a variety of mental health facilities, treatment methods changed radically with the introduction of tranquilizers and other psychoactive drugs. As a result, many patients in long-term mental hospitals, previously doomed to aging and dying in an institution, were able to return to the community where the increased availability of outpatient community resources, followup care, and related social services made it possible to maintain many such patients in the community. The availability of nursing homes and other resources providing services similar to those in a mental hospital also made it possible to prevent admission to the mental hospital of certain kinds of patients, for example, those with diseases of the senium or chronic schizophrenia.

Although most Federal legislation focused on general mental health care, the need for specific services for children was recognized. This resulted in the establishment of the Joint Commission on Mental Health of Children through a grant by the National Institute of Mental Health from funds provided by the Social Security Amendments of 1965. The purpose of this group has been to develop "a program of research into and study of our resources, methods, and procedures for diagnosing and preventing emotional illness in children and of treating, caring for, and rehabilitating children with emotional illness" in order "to develop a body of knowledge and a set of recommendations representing the very best this country has to offer to strengthen the mental health of its children" (5). This report was stimulated by and prepared for the Commission to assist them in carrying out this responsibility.

While not specifically oriented toward the mental health of children, the National Institute of Mental Health, nevertheless, has allocated a large part of its grants for research, demonstration projects, and training toward primary prevention and treatment of childhood mental illness, and a large segment of its intramural programs has been oriented toward this end. The Institute also has played a major role in promoting legislation and in administering the funds provided by such legislation.

This report, describing the utilization of psychiatric facilities by children, serves as a backdrop to both the National Institute of Mental Health child program and the work of the Joint Commission on Mental Health of Children. Included are extensive data on patterns of care by age, sex, diagnostic, and other characteristics of children under 18 years of age served in the following types of psychiatric facilities in the United States: outpatient psychiatric clinics, State and county mental hospitals, private mental hospitals, and psychiatric services in general hospitals. Knowledge of the utilization patterns of these facilities is particularly important in planning and administering the rapidly expanding and developing mental health programs throughout the nation.

Only limited information on children served in psychiatric day-night facilities, residential treatment centers other than those operated by State mental hospitals, or treated in private psychiatric practice, is available. In spite of the paucity of information for the latter facilities, however, sufficient information is available to permit an estimate of the number of children receiving services in psychiatric facilities in the United States during a year. Data presented are obtained from the annual nationwide reporting programs and special studies conducted by the Biometry Branch, National Institute of Mental Health (6, 7, 8).

TOTAL NUMBER OF CHILDREN SERVED IN PSYCHIATRIC FACILITIES IN THE UNITED STATES

About 473,000 children under 18 years of age received some service in a psychiatric facility in the United States in 1966 (table 1). Of these children, 84 percent were seen on an outpatient basis and 14 percent were hospitalized. Of the latter, 27,400 were patients in public mental hospitals, and 28,000 in general hospitals.

Children comprised 34 percent of the total caseload of outpatient psychiatric clinics. In contrast, 3 to 8 percent of the caseloads of inpatient facilities consisted of persons under 18 years of age. Of the three types of hospitals, State and county mental hospitals had the smallest proportion of children.

Table 1

Number of Psychiatric Facilities and Estimated Number of Children under 18 Years of Age under Care during the Year in Each Type of Facility, 1966

Type of facility	Facilities		Total patients -- all ages		Children under 18 years of age		
	Number	Percent distribution	Estimated number	Percent distribution	Estimated number	Percent distribution	Percent of total patients in each type of facility
		(%)		(%)		(%)	(%)
Outpatient psychiatric clinics 1/	2,122	56	1,186,000	46	399,000	84	34
State and county mental hospitals	297	8	807,000	31	27,400	6	3
Private mental hospitals	175	5	105,000	4	8,400	2	8
General hospitals with psychiatric services	888	23	466,000	18	28,000	6	6
Psychiatric day-night units 2/	173	5	15,600	1	2,500	1	16
Residential treatment centers (not in state mental hospitals) 3/	149	4	---	---	8,000	2	---
Total	3,804	100	2,579,600	100	473,300	100	18

1/ Includes clinics of the Veterans Administration.

2/ Based on survey conducted in 1965 providing estimated number of children served in 1964. Includes day-night units of the Veterans Administration.

3/ Based on the average capacity or average number of residents reported for 92 facilities.

Source: Directory of Facilities for Mentally Ill Children in the United States, 1967, The National Association for Mental Health, Inc.
The Directory for Exceptional Children, F. Porter Sargent, Fifth Edition, 1965.

UTILIZATION OF SPECIFIC FACILITIES

OUTPATIENT PSYCHIATRIC CLINICS

Number of Patients and Patient Movement

The number of children under 18 years of age receiving care in clinics has almost doubled since 1959, from 208,000 to 399,000 in 1966 (9, 10) (tables 2a, 2b; figure 1a). The growth in the patient caseload was only partly due to the increase in the child population in the United States. Even if we account for the general population growth, the greater demand for and availability of these services resulted in a 70 percent increase in usage rates (per 100,000 population) between 1959 and 1966 (figure 1b). The numbers of patients under care during this period increased more rapidly than either the number of clinics or the professional man-hours available (11).

Of the children under care during 1966, about 52 percent were new admissions to the clinic of application, and an additional 5 percent were readmissions who had been under care in the clinic in a previous year. The remaining 43 percent had been on the clinic rolls from the preceding year.

An estimated 216,000 children, or 54 percent of the caseload, were terminated from clinic services in 1966 (figures 2a, 2b). The proportion terminated has decreased slightly each year during the past few years (60 percent in 1959) resulting in a larger proportion of patients being "carried over" at the beginning of each year.

Most of the data on clinic patient characteristics and services received, discussed in this report, are based on information on patients for whom services were terminated. Because of the short duration of clinic service, data on terminations are considered a good approximation of admissions (12).

Age and Sex

The adolescent group, age 10-17 years, comprised two-thirds of the children served and, in fact, for boys was the largest group of patients of any comparable age span (10 year age group) in the clinic population (figures 1a, 1b). Children 5 to 9 years accounted for an additional third of the patients under 18 years. Unlike the pattern of increased usage by children of school age during the last decade, pre-schoolers accounted for only 6 percent of the clinic child population and have shown little change in the extent of clinic usage in the last few years. Rates of clinic utilization for children peaked at 9 and 10 years for younger children and about 14 or 15 years of age for adolescents (13, 14) (figure 3).

Twice as many boys as girls were given service in clinics (tables 2a, 2b). This was generally true for all ages under 18 years. Little variation in this sex ratio, from year to year, has been noted. However, at 18 and 19 years of age, the rates for boys dropped sharply to nearly half the 10-17 level (from about 300 terminations, per 100,000 population, to approximately 170). This drop not only reflects discontinued contact with the public schools, one of the major case-finding agencies for children, but also the lack of other major community programs which may serve as case-finding and referral agencies for young adults.

Diagnostic Characteristics

Thirty-four percent of the children who were terminated from clinic service received a diagnosis of transient situational personality disorder (table 3a; figure 4a) while 25 percent were "undiagnosed." The large proportion of children not receiving a diagnosis reflects, to a large extent, the brief contact that many children have with a clinic. In terms of other reported diagnoses, among the very young children (under 5 years of age), brain syndromes and mental deficiency accounted for almost half (table 3a). Personality disorders, particularly passive aggressive personality disorder, assumed considerable importance among older children, especially among the boys (figures 4b, 4c).

Certain service factors affect the completeness of the diagnostic data. Only 6 percent of the children receiving treatment services were "undiagnosed" while a third of the nontreated group were reported in this category. The intake practices or policies regarding certain diagnostic groups may also influence the prevalence of certain disorders in clinics. For example, a recent study indicated that only two-thirds of the clinics serving children accept mental retardates (15).

Color

Current data by color are not available. However, data obtained from a special study for 1961 may still be representative of current utilization patterns (14). The principal differences by color were the lower rates for nonwhites than whites among the younger children (under 11 years of age) in contrast to the higher rates for adolescents (figure 5). This pattern was consistent for both boys and girls. Further, nonwhite rates were higher than whites of the same sex for all children with mental deficiency and for adolescents with psychotic disorders (figure 6).

It should be noted that these data by color were more completely reported by clinics in the South and may not be representative of the United States as a whole.

Referral Source

Data on the source of referral, that is, the individual or type of agency recommending that the patient apply for clinic service, indicate that three groups were most responsible for recommending clinic services for children: the physician or other community health agency (26 percent), the school (24 percent), and the family or friends (20 percent) (16). Younger children were referred most frequently by physicians or their families, older children most frequently by schools (17, 13). Among the adolescents, a larger proportion of boys than girls were referred by schools and courts while more girls than boys were referred by private physicians, social service agencies, or their families (figure 7).

Type of Service

One-third of the children received treatment services while two-thirds received nontreatment services. For reporting purposes, treatment services are defined as "a service usually initiated by clinic plan following application and diagnosis (explicit and implicit) designed to reduce some amount of the patient's symptomatology" (7). Nontreatment services usually consist of intake services and referral to other agencies, and evaluation and psychological testing, frequently for other agencies and particularly for schools in rural areas.

A variety of factors influence the provision of treatment in a clinic, such as the patient's age, sex, diagnosis, and the referral source. For example, in the adolescent group, fewer of those 14 and 15 years of age but more of the 18 and 19 year olds were treated. Almost half of the adolescents with psychoneurotic, psychotic, and personality disorders received treatment services; however, only slightly more than a third of those with brain syndromes and very few patients with mental deficiency (12 percent) received this service (figure 8). Regardless of age or diagnosis, more girls were treated than boys.

The source of referral of patients also influenced the probability of treatment. Children referred by mental hospitals, probably for aftercare services, were more frequently treated than those referred by most other agencies. Those referred by training schools for the mentally retarded rarely received treatment (figure 9).

Amount of Service

One method used to evaluate the amount of service provided to children in outpatient clinics is a count of the number of person-interviews received. Children who did not receive treatment services had a median of three interviews; those receiving treatment, a median of 16 interviews. In examining the data for adolescents, we see that the median number of interviews was considerably higher for the younger adolescents than for the older ones (figure 10), and higher for boys than girls except for the oldest group. The larger number of interviews for the younger patients reflects, in part, the greater involvement of parents or collaterals in services for the younger child, since each person present at an interview is counted. Data from table 4 show that considerably more of the older adolescents were interviewed without their parents or collaterals than were the younger ones.

Disposition

Information is reported on the disposition of the clinic case after termination—that is, whether the patient withdrew on his own, the clinic closed the case because further care was not needed, or the clinic referred the patient to another community organization for further service and, if so, to which type of agency.

According to the 1963 special clinic study, 28 percent of the children under 18 years of age "dropped out" of clinic service, 33 percent were terminated because further care was not indicated or for other reasons, and 39 percent were referred to other agencies for further care (16).

Patient characteristics and referral source, as well as clinic service, appear to influence the outcome of service (appendix tables 1-4). For example, in terms of age, older adolescents (16-19 years) showed a greater tendency to withdraw from service than younger ones, regardless of whether they were seen in the clinic for treatment or for other services; or they were more likely to be referred to another psychiatric facility after receiving clinic services. The younger patients (12-15 years), on the other hand, were more often referred to a community agency for further care, probably to the original referring agencies. Regarding diagnosis, children with the more serious psychiatric disorders such as brain syndromes, mental deficiency, and psychosis were most likely to be referred elsewhere for further care and least likely to withdraw from service on their own.

Data on referral source and disposition clearly indicate that the clinic is frequently used as an evaluating service only. Patients who were referred by community agencies such as schools, social agencies, and courts were generally referred back to the same type of agency. This pattern was not necessarily consistent for patients sent to the clinic by their families. These patients more frequently withdrew from clinic services than those referred by community agencies. If they were referred elsewhere subsequent to clinic care, the referral was more frequently to private psychiatrists and other outpatient psychiatric resources than to any other community agency.

Treated patients were more likely to be discharged by the clinic with "no further care indicated" and less likely to be referred to other agencies for additional services.

Staffing Patterns

Data on staffing patterns specifically for children's clinics are not readily available for 1965 or 1966. However, trends in staffing patterns, in 1965, for all clinics can be examined to provide information on availability of clinic resources.

Clinics generally employ a "core" mental health team consisting of at least a psychiatrist, psychologist, and social worker. Some also employ other professionals such as nurses, physicians, speech therapists, etc. In 1965, the mental health team provided 221 professional man-hours per week per 100,000 population, according to a nationwide survey conducted the week of April 30, 1965 (9).

Less than a third of the regular clinic staff worked full-time. Excluding trainees, only 13 percent of the psychiatrists, 36 percent of the psychologists, and 54 percent of the social workers worked full-time. Nevertheless, in terms of man-hours, the psychiatrist provided 31 percent of the clinic professional man-hours, the psychologist 21 percent, and the social worker 38 percent. A variety of other mental health professionals supplied the remaining 10 percent.

The amount of time devoted by the psychiatrist, psychologist, and social worker, shows considerably smaller increases (approximately 8 percent from 1963 to 1965, respectively) than that by other professionals (39 percent).

Considering that between 1963 and 1965 the increase in the professional man-hours rate (per 100,000 persons) was only 14 percent, and in the number of patients per 100,000 population 21 percent, demands for service are increasing at a considerably more rapid rate than our ability to fulfill them.

Geographic Distribution

The variation in the geographic distribution of clinics is shown in table 5. In 1966, half the States had less than 25 clinics; only one-fifth had 50 or more. According to the 1965 survey, the ratio of professional weekly man-hours for individual States ranged from 758 per 100,000 population to 23 (table 6). The average number of man-hours per 100,000 population was 221, the median 137. Only 10 States provided at least 280 man-hours per 100,000 population or sufficient man-hours for two full clinic teams.

Fifteen States reported less than 100 man-hours. In general, the States with the most clinics provided relatively greater numbers of man-hours per 100,000 population. As a result, the average number of man-hours was heavily weighted by man-hours contributed by these States.

A special study on the availability of clinics in areas designated rural in the 1960 census, was conducted for 1965. A rural area, for this study, was defined as one located in a county in which 50 percent or more of the population lived in towns of less than 2,500 persons and where the county is not in a standard metropolitan statistical area. This study was considered particularly pertinent because, in rural areas, the psychiatric clinic is frequently the only mental health resource available to children. In urban and suburban areas, on the other hand, there are a variety of other social agencies such as family service and welfare agencies and psychological testing services of schools.

Although there has been a marked increase in clinics nationwide, rural resources continued to remain sparse. Of the 2,007 clinics open on April 30, 1965, only 234 clinics located in rural areas served children (18). A total of 25,000 children were served in these clinics in 1965, only 8 percent of all children under clinic care in the total United States (table 7) though, according to the 1960 census, one-third of all children lived in rural areas.

The shortage of services in rural areas is apparent in several aspects of clinic service: hours clinics are open, professional man-hours available, and types of services provided. For example, only slightly more than half of the rural clinics were open full-time as compared to almost three-quarters of the clinics nationwide. Only 5 percent of the professional man-hours available in clinics during the reporting week of April 30 were provided in rural clinics. The full orthopsychiatric team of psychiatrist, psychologist, and social worker, was present in only 60 percent of the rural clinics in contrast to about 80 percent of the large urban clinics. Furthermore, services tended to be brief and consisted frequently of psychological testing, thus reflecting the lack of such services in schools and other community agencies in these areas. This shortage of services may reflect problems in staffing, the large proportion of time devoted to travel and limited demand for service. It must be kept in mind, also, that clinics located in urban areas may serve the surrounding rural population. Data on the number of rural residents seen in urban facilities are not available on a nationwide basis.

STATE AND COUNTY MENTAL HOSPITALS

Current Utilization Patterns: Age, Sex, Diagnosis

In 1966 about 27,400 children were under care in the 298 State or county mental hospitals in the United States. Among the reported 10,000 first admissions, 57 percent of the children were 15-17 years of age, 32 percent 10-14 years of age, and 11 percent under 10 years of age (19) (table 3b). The age distributions for first admissions and resident patients were similar, with a slightly higher proportion of children 15-17 years among the first admissions. As was noted for clinic patients, boys outnumbered girls 2 to 1 among first admissions. Boys apparently remain in the hospital longer since relatively more were resident at the end of the year than were admitted during the year.

Schizophrenic reactions and transient situational personality disorders were predominant in each age group (figures 4a, 4b, 4c). Schizophrenia accounted for about 20 percent of the first admissions and 30 percent of the resident patients, while transient situational personality disorders comprised 30 percent of the first admissions and 20 percent of the resident patients. Brain syndromes were also relatively important among children under 10 years (18 percent of the first admissions and 27 percent of the resident patients).

Data on the proportion of patients with certain disorders who are admitted during the year, compared with the proportion who are resident on a specific day, provide indicators, under certain conditions, of duration of care required for certain diseases. Reported data show that patients with schizophrenia, brain syndromes, and mental deficiency are hospitalized for longer periods than those with psychoneurotic, personality, and transient situational personality disorders.

Trends

Until 1966, trend data on children served in

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these hospitals have been limited because only age breakdowns for "under 15 years" and "15-24 years" have been available (appendix tables 5-10).

Both first admission and resident patient rates among those under 15 years doubled during the last decade. Rates for boys increased at a somewhat more rapid rate than those for girls (figures 11, 12).

A comparison of trends in rates for other age groups with those of children shows that among first admissions increases have been noted for age groups 15-24 years and 25-34 years, although they are less marked than the increases shown for those under 15 years. The rates for all other age groups have remained relatively stable or decreased. Similarly, for resident patients, rates for all age groups 15 years and over either remained relatively stable or showed a decline while those for children under 15 years increased.

Data on factors affecting the admission of children to hospitals are extremely limited. Admission rates are dependent on the availability of inpatient beds for children, adequate hospital programs specifically for children, and family acceptance of hospitalization. Availability of suitable outpatient programs for seriously disturbed children and adequate living arrangements in the community may also affect hospitalization of children.

Geographic Distribution

The distribution of public mental hospitals by State is shown in table 5. Only nine States had 10 or more State and county mental hospitals. Wisconsin had 42, most of which were county hospitals. Considerable variation is noted in the percent of children under 15 who were first admitted to State and county mental hospitals in 1965 (19). For example, 8 percent of all first admissions in Missouri were under 15 years while no children under 15 years were admitted to Maine hospitals.

PRIVATE MENTAL HOSPITALS

Current Utilization Patterns: Age, Sex, Diagnosis

About 8,000 children were served in the 174[1] known private mental hospitals in 1966. Very few children under 10 years (5 percent of the total number of children under 18 years of age) received care in these hospitals (table 3c). In contrast to State mental hospitals, the number of first admissions of boys was only slightly higher than that of girls. Three-quarters of the first admissions 10-17 years of age had psychotic disorders (25 percent), personality disorders (21 percent), and transient situational disorders (27 percent) (figures 4a, 4b, 4c). The specific disorders of importance among this group were schizophrenic reactions (19 percent), personality trait disturbance (8 percent), and psychoneurotic depressive reactions for girls (11 percent). Unlike the public mental hospitals, but similar to general hospitals, private mental hospitals admitted a relatively large proportion of children diagnosed with psychoneurotic disorders (17 percent in private mental hospitals compared with 3 percent in State mental hospitals).

Considerably more boys were resident patients than girls, indicating that boys remained under care for longer periods. Only 1 percent of the resident patients under 18 years was under 5 years of age. Of the relatively few children 5-9 years of age resident at the end of 1966 (6 percent of the children), three types of disorders predominated—brain syndromes (35 percent), personality disorders among boys (30 percent), and schizophrenic reactions among girls (28 percent). Schizophrenic reactions (20 percent), and personality disorders (26 percent), were the most frequent diagnoses among adolescent residents.

Unlike the pattern seen in other psychiatric facilities in which more girls than boys were reported with psychoneurotic disorders, slightly more boys than girls among the resident patients were thus diagnosed. Children with psychoneurosis were in the hospital for short periods of time, however, since the percent with these disorders was considerably smaller among the resident patients (10 percent) than the first admissions (17 percent).

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[1] During the year 1965, the universe of known private mental hospitals was reviewed by the Biometry Branch, NIMH, in conjunction with the State mental health authorities and the National Association of Private Psychiatric Hospitals. In this review it was found that of the 238 hospitals classified as private mental hospitals for 1965 and preceding years, 64 were in fact hospitals for alcoholics, geriatric hospitals, or nursing homes, or for some other reason should not be considered private mental hospitals. The apparent drop in the number of hospitals in operation in 1966 is due, therefore, to a more careful classification of facilities, rather than a change in the number of hospitals.

Trends

Trend data on first admission rates of children to private mental hospitals are available only for age groups under 15 years and 15-24 years of age. For children under 15 years of age, patterns are similar to those of the State and county mental hospitals (20) (appendix tables 11-13). During the last 15 years, rates tripled for those under 15 years (1.3 per 100,000 population in 1965), and showed moderate increases for those 15-24 years (22.4 per 100,000 population in 1965). Rates for other age groups decreased or remained relatively stable. In contrast to the marked differences in rates for boys and girls and young adults (15-24 years) in public mental hospitals, the rates for boys under 15 years (1.4) were only slightly higher than for girls (1.2), while the rates for girls (25.0) were higher than boys (19.6) in the 15-24 year old group.

Geographic Distribution

The 174[2] known private mental hospitals in the United States in 1966 were located in only 36 States (table 5). California, with 25, had the largest number while 30 States had less than 10 each.

INPATIENT PSYCHIATRIC SERVICES OF GENERAL HOSPITALS

Data on discharges by age, sex and diagnosis are collected from inpatient psychiatric services in general hospitals. These data provide a good estimate of admissions because of the short duration of stay in a general hospital. About 28,000 children under 18 years of age received psychiatric inpatient care in the 888 general hospitals in 1966.

Similar to the utilization patterns in other facilities, more boys under 9 years received care than girls. Among older children (10-17 years), however, considerably more girls were served (table 3b).

Very young children (under 5 years of age) comprised 14 percent of the children under 18 years of age discharged from general hospitals; those 5-9 years, 10 percent; young adolescents (10-14 years), another 24 percent; and older adolescents 52 percent. Of the children under 5 years, 66 percent were reported with brain syndromes, and 14 percent with mental deficiency. Of the brain syndrome group, convulsive disorders were responsible for 54 percent, and drug or poison intoxication for another 25 percent. Among the few 5 to 9 year olds, convulsive disorders (17 percent) and mental deficiency (14 percent) were among the predominant diagnoses, and transient situational personality disorder occurred more frequently (17 percent) among the younger children. Schizophrenic reactions, accounting for 14 percent, psychoneurotic disorders and transient situational personality disorders, 21 percent each, were the most important diagnoses for the 10 to 14 year olds.

Of those 15 to 17 years of age, 17 percent had schizophrenic reactions and 27 percent psychoneurotic disorders, particularly psychoneurotic depressive reactions (11 percent). Unlike findings for other facilities, personality disorders were not as important among boys as were the psychoneurotic disorders. Transient situational personality disorders (20 percent) were a major cause for hospitalization in this age group.

Since no data on children are available for previous years, trends will not be discussed. It is noteworthy to mention, however, that 25 years ago only 48 general hospitals admitted psychiatric patients (21), while in 1966, 888 did so.

PSYCHIATRIC DAY-NIGHT SERVICES

Information on psychiatric day-night services in the United States has been collected since 1963. For NIMH reporting purposes, these services are defined as "services having an organized staff whose primary purpose is to provide a planned program of milieu therapy and other treatment modalities. The service is designed for patients with mental or emotional disorders or mental retardation who spend only part of a 24-hour period in the program" (22).

A total of 173 units in the United States reported to the NIMH as of February 1965. Of these, only 72 were open to children under 12 years of age, and 120 were open to children 12 to 17 years. Of the 16,000 patients served during the year, 2,500 or 16 percent were children. Twelve hundred were under 12 years, and 1,300, 12 to 17 years of age. All facilities serving only children provided educational therapy. Between 80 to 90 percent provided individual, family, group, and recreational therapies (table 8).

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[2] See footnote page 8

Most of the children's facilities reported full-time attendance (5 days a week) by their patients, a reflection of the educational characteristics of children's day care facilities.

A rapid growth is expected in the number of day-night units, particularly as they become integrated into community mental health centers. Information on the characteristics of patients served in these units is not yet available but will be in the near future.

PRIVATE PSYCHIATRIC PRACTICE

Very little data are available on the number and characteristics of patients served in private psychiatric practice. A sample survey of characteristics of patients treated by private psychiatrists indicated that 4 percent of the approximately 750,000 patients seen in private practice, or 30,000 children under 15 years, received these services annually (23) (figure 13). Another study of a prepaid group medical practice showed that children under 15 years of age referred for psychiatric service comprised a considerably lower proportion of private psychiatric service (0.4 percent) (24). Data from the Monroe County, N.Y., psychiatric case register indicated that about 3 percent of the private practitioner caseload consisted of children under 15 (25). Such findings tend to corroborate the impression that relatively few children receive private psychiatric care.

COMMUNITY MENTAL HEALTH CENTERS

The development of the Community Mental Health Center program is too recent to measure its impact on the treatment of children. However, a recent survey conducted by the Biometry Branch indicated that 114 out of 133 reporting facilities served approximately 1,400 children under 18 years of age, or 20 percent of the 7,100 patients under care in such centers during a 1-day period in November 1967. This proportion of children falls between the 34 percent under care in outpatient clinics and the 8 percent or less in inpatient facilities.

Two-thirds of the children served in centers were boys. Of those children under 12 years, boys outnumbered girls 3 to 1, but the ratio was 3 to 2 for 12 to 17 year olds. Most children were outpatients and the largest proportion was diagnosed as having transient situational personality disorders. The most frequently used treatment methods were individual, group, and recreational therapies.

Table 2a

Estimated Number of Patients under Care and Terminations during the Year, Outpatient Psychiatric Clinics, United States, 1959-1966

Year	Patients under care				Terminations			
	Total all ages	Total under 18 years	Under 10 years	10-17 years	Total all ages	Total under 18 years	Under 10 years	10-17 years
	(numbers in thousands)							
Both sexes								
1959	502	208	86	122	283	125	53	72
1960	578	238	96	142	313	137	55	82
1961	669	241	97	144	349	138	55	83
1962	741	270	105	165	384	154	61	93
1963	862	295	112	183	453	164	63	101
1964	993	330	127	203	523	182	70	112
1965	1,085	384	145	239	543	210	79	131
1966 1/	1,186	399			593	216		
Males								
1959	305	138	58	80	167	83	35	48
1960	347	158	64	94	183	91	37	54
1961	386	160	65	95	197	92	37	55
1962	425	180	72	108	215	102	41	61
1963	488	195	77	118	248	109	43	66
1964	544	217	87	130	277	120	48	72
1965	605	255	100	155	294	140	55	85
Females								
1959	197	70	28	42	116	42	18	24
1960	231	80	32	48	130	46	18	28
1961	283	81	32	49	152	46	18	28
1962	316	90	33	57	169	52	20	32
1963	374	100	35	65	205	55	20	35
1964	449	113	40	73	246	62	22	40
1965	480	129	45	84	249	70	24	46

1/ Excludes Puerto Rico and Virgin Islands.

Source: Outpatient Psychiatric Clinics - Annual Statistical Report, Data on Patients, 1959-1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

Provisional Patient Movement Data, Outpatient Psychiatric Clinics, United States, 1966. Mental Health Statistics, Current Facility Reports, Series MHB-J-1, January 1967. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

Table 2b

Estimated Number of Patients under Care and Terminations during the Year, Rates per 100,000 Population 1/, Outpatient Psychiatric Clinics, United States, 1959-1965

Year	Patients under care				Terminations			
	Total all ages	Total under 18 years	Under 10 years	10-17 years	Total all ages	Total under 18 years	Under 10 years	10-17 years
Both sexes								
1959	286.0	327.0	224.0	493.0	161.9	197.0	135.8	292.7
1960	317.8	364.2	242.3	552.7	172.2	209.6	139.6	317.8
1961	368.3	369.2	244.4	562.3	192.3	211.6	139.9	322.3
1962	403.6	402.9	259.7	622.5	209.4	229.8	149.6	352.8
1963	462.7	430.0	274.3	664.0	243.1	239.4	153.2	368.9
1964	525.2	471.8	307.6	711.0	276.5	260.6	170.0	392.6
1965	561.6	538.1	347.4	805.1	281.1	294.0	189.8	439.7
Males								
1959	356.0	427.0	292.0	639.0	196.3	257.1	177.8	381.3
1960	387.5	476.4	317.0	723.4	204.0	273.9	182.6	415.4
1961	431.5	482.6	324.2	728.1	219.9	276.5	185.7	417.4
1962	474.8	529.1	347.8	807.9	240.9	301.8	199.7	458.8
1963	539.0	560.9	370.4	848.0	273.4	312.5	206.9	471.5
1964	591.3	610.0	413.0	897.9	301.6	336.9	228.1	495.9
1965	644.4	703.9	472.0	1029.4	312.8	384.5	258.1	562.0
Females								
1959	220.0	224.0	151.0	337.0	129.1	134.6	92.1	200.9
1960	250.2	248.4	165.1	377.0	141.3	143.1	95.2	217.2
1961	307.0	252.1	161.9	391.4	165.6	144.5	92.6	224.5
1962	335.8	272.6	168.6	431.7	179.4	155.5	97.7	243.8
1963	390.6	294.9	175.0	474.7	214.4	164.0	97.6	263.4
1964	462.8	329.0	198.5	518.7	252.7	181.7	109.8	286.2
1965	483.5	366.7	218.2	574.0	251.2	200.3	119.0	313.8

1/ Rates are computed on the basis of July 1 civilian population, U. S. Bureau of Census, Current Population Reports, Series P-25.

Source: Outpatient Psychiatric Clinics - Annual Statistical Report, Data on Patients, 1959-1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

Table 3a

Children Served in Psychiatric Facilities, by Age, Sex, Diagnosis, and Type of Facility, United States, 1966 1/

Psychiatric Diagnosis and Sex	Outpatient Psychiatric Clinics: Terminations 2/					General Hospital Inpatient Psychiatric Facilities: Discharges 3/				
	Total under 18 years	Under 5 years	5-9 years	10-14 years	15-17 years	Total under 18 years	Under 5 years	5-9 years	10-14 years	15-17 years
Total Patients	158,062	7,456	50,217	61,349	39,040	17,815	2,495	1,784	4,277	9,259
Acute and chronic brain syndromes	6,812	966	3,195	1,929	722	3,414	1,655	520	522	717
Convulsive disorder	1,068	86	380	377	225	1,732	900	306	300	226
Psychotic disorders	5,767	263	1,316	1,773	2,415	2,938	55	137	744	2,002
Schizophrenic reactions	4,804	189	1,041	1,491	2,083	2,251	34	89	589	1,539
Psychophysiologic disorders	760	34	230	314	182	851	87	163	282	319
Psychoneurotic disorders	10,990	157	3,177	4,630	3,026	3,685	73	203	884	2,525
Anxiety reaction	4,472	90	1,654	1,897	831	1,336	28	98	354	856
Psychoneurotic depressive reaction	2,434	16	304	967	1,147	1,387	27	48	252	1,060
Personality disorders	27,124	341	5,230	11,728	9,825	2,424	102	198	592	1,532
Personality pattern disturbance	5,204	54	778	2,165	2,207	551	16	40	129	366
Personality trait disturbance	14,358	71	2,369	6,634	5,284	965	25	60	245	635
Passive aggressive personality	11,269	45	1,719	5,355	4,150	397	3	19	115	260
Transient situational personality dis.	53,459	1,715	16,863	21,609	13,272	3,152	149	296	906	1,801
Mental deficiency	10,142	1,146	4,207	3,444	1,345	1,055	351	244	261	199
Without mental disorder	4,255	676	1,590	1,333	656	72	10	5	23	34
Undiagnosed	38,753	2,158	14,409	14,589	7,597	224	13	18	63	130
Total Male	103,959	4,761	35,575	41,415	22,208	8,336	1,340	1,051	2,085	3,860
Acute and chronic brain syndromes	4,647	583	2,234	1,374	456	1,874	891	311	296	376
Convulsive disorder	654	56	241	241	116	925	494	167	160	104
Psychotic disorders	3,696	194	1,027	1,119	1,356	1,466	29	91	380	966
Schizophrenic reactions	3,098	137	816	949	1,196	1,122	16	60	296	750
Psychophysiologic disorders	437	21	145	186	85	356	41	79	138	98
Psychoneurotic disorders	6,392	108	2,177	2,858	1,249	1,306	33	105	345	823
Anxiety reaction	2,883	66	1,186	1,236	395	543	13	57	157	316
Psychoneurotic depressive reaction	1,192	8	225	570	389	453	10	26	96	321
Personality disorders	19,354	242	4,034	8,574	6,504	1,151	48	112	308	683
Personality pattern disturbance	3,489	40	568	1,504	1,377	211	8	24	57	122
Personality trait disturbance	10,387	49	1,896	4,955	3,487	478	14	34	135	295
Passive aggressive personality	8,410	31	1,399	4,082	2,898	214	1	7	67	139
Transient situational personality dis.	35,443	1,144	12,420	14,590	7,289	1,428	81	197	430	720
Mental deficiency	6,263	725	2,596	2,123	819	615	202	141	154	118
Without mental disorder	2,568	393	997	813	365	36	9	3	10	14
Undiagnosed	25,159	1,351	9,945	9,778	4,085	104	6	12	24	62
Total Female	54,103	2,695	14,642	19,934	16,832	9,479	1,155	733	2,192	5,399
Acute and chronic brain syndromes	2,165	383	961	555	266	1,540	764	209	226	341
Convulsive disorder	414	30	139	136	109	807	406	139	140	122
Psychotic disorders	2,071	69	289	654	1,059	1,472	26	46	364	1,036
Schizophrenic reactions	1,706	52	225	542	887	1,129	18	29	293	789
Psychophysiologic disorders	323	13	85	128	97	495	46	84	144	221
Psychoneurotic disorders	4,598	49	1,000	1,772	1,777	2,379	40	98	539	1,702
Anxiety reaction	1,589	24	468	661	436	793	15	41	197	540
Psychoneurotic depressive reaction	1,242	8	79	397	758	934	17	22	156	739
Personality disorders	7,770	99	1,196	3,154	3,321	1,273	54	86	284	849
Personality pattern disturbance	1,715	14	210	661	830	340	8	16	72	244
Personality trait disturbance	3,971	22	473	1,679	1,797	487	11	26	110	340
Passive aggressive personality	2,859	14	320	1,273	1,252	183	2	12	48	121
Transient situational personality dis.	18,016	571	4,443	7,019	5,983	1,724	68	99	476	1,081
Mental deficiency	3,879	421	1,611	1,321	526	440	149	103	107	81
Without mental disorder	1,687	283	593	520	291	36	1	2	13	20
Undiagnosed	13,594	807	4,464	4,811	3,512	120	7	6	39	68

1/ Provisional data.

2/ Includes data from 1439 of 2079 known clinics (excludes clinics of the Veterans Administration).

3/ Includes data from 650 of 888 known hospitals.

Table 3 b

Children Served in Psychiatric Facilities, by Age, Sex. Diagnosis, and Type of Facility, United States, 1966 1/

Psychiatric Diagnosis and Sex	State and County Mental Hospitals									
	First Admissions 2/					Resident Patients 3/				
	Total under 18 years	Under 5 years	5-9 years	10-14 years	15-17 years	Total under 18 years	Under 5 years	5-9 years	10-14 years	15-17 years
Total Patients	10,182	114	1,038	3,216	5,814	10,309	108	1,325	3,937	4,939
Acute and chronic brain syndromes	796	52	158	268	318	1,599	74	318	598	609
Convulsive disorder	311	6	35	108	162	544	16	56	173	299
Psychotic disorders	2,283	17	296	653	1,317	3,349	17	419	1,195	1,718
Schizophrenic reactions	2,064	11	268	609	1,176	3,033	9	356	1,080	1,588
Psychophysiologic disorders	21	-	1	9	11	6	-	-	2	4
Psychoneurotic disorders	589	2	30	188	369	326	-	28	144	154
Anxiety reaction	144	-	10	58	76	82	-	8	48	26
Psychoneurotic depressive reaction	232	1	6	57	168	113	-	8	35	70
Personality disorders	1,727	6	66	415	1,240	938	-	53	316	569
Personality pattern disturbance	305	-	11	77	217	203	-	9	56	138
Personality trait disturbance	764	4	43	230	487	518	-	34	226	258
Passive aggressive personality	457	2	29	158	268	325	-	20	131	174
Transient situational personality dis.	3,128	10	341	1,136	1,641	2,240	2	284	1,020	934
Mental deficiency	855	17	92	304	442	1,227	11	148	421	647
Without mental disorder	179	4	5	38	132	80	-	5	22	53
Undiagnosed	604	6	49	205	344	544	4	70	219	251
Total Male	6,362	72	825	2,003	3,462	6,866	60	1,020	2,762	3,024
Acute and chronic brain syndromes	545	36	128	174	207	1,080	39	211	422	408
Convulsive disorder	191	3	31	61	96	346	7	38	110	191
Psychotic disorders	1,348	12	232	370	734	2,172	11	333	819	1,009
Schizophrenic reactions	1,222	7	210	346	659	1,962	6	286	741	929
Psychophysiologic disorders	6	-	-	3	3	1	-	-	1	-
Psychoneurotic disorders	248	-	24	93	131	180	-	23	93	64
Anxiety reaction	73	-	6	31	36	55	-	6	32	17
Psychoneurotic depressive reaction	79	-	6	25	48	50	-	7	18	25
Personality disorders	1,185	5	55	273	852	682	-	44	231	407
Personality pattern disturbance	220	-	9	58	153	160	-	7	47	106
Personality trait disturbance	488	3	35	144	306	357	-	28	160	169
Passive aggressive personality	314	2	24	106	182	227	-	17	91	119
Transient situational personality dis.	1,924	5	280	726	913	1,536	-	239	758	539
Mental deficiency	573	8	66	200	299	804	7	112	274	411
Without mental disorder	141	2	4	30	105	52	-	4	12	36
Undiagnosed	392	4	36	134	218	359	3	54	152	150
Total Female	3,820	42	213	1,213	2,352	3,443	48	305	1,175	1,915
Acute and chronic brain syndromes	251	16	30	94	111	519	35	107	176	201
Convulsive disorder	120	3	4	47	66	198	9	18	63	108
Psychotic disorders	935	5	64	283	583	1,177	6	86	376	709
Schizophrenic reactions	842	4	58	263	517	1,071	3	70	339	659
Psychophysiologic disorders	15	-	1	6	8	5	-	-	1	4
Psychoneurotic disorders	341	2	6	95	238	146	-	5	51	90
Anxiety reaction	71	-	4	27	40	27	-	2	16	9
Psychoneurotic depressive reaction	153	1	-	32	120	63	-	1	17	45
Personality disorders	542	1	11	142	388	256	-	9	85	162
Personality pattern disturbance	85	-	2	19	64	43	-	2	9	32
Personality trait disturbance	276	1	8	86	181	161	-	6	66	89
Passive aggressive personality	143	-	5	52	86	98	-	3	40	55
Transient situational personality dis.	1,204	5	61	410	728	704	2	45	262	395
Mental deficiency	282	9	26	104	143	423	4	36	147	236
Without mental disorder	38	2	1	8	27	28	-	1	10	17
Undiagnosed	212	2	13	71	126	185	1	16	67	101

1/ Provisional data.

2/ Includes data from 219 of 298 known hospitals.

3/ Includes data from 211 of 298 known hospitals.

Table 3c

Children Served in Psychiatric Facilities, by Age, Sex, Diagnosis, and Type of Facility, United States, 1966 1/

Psychiatric Diagnosis and Sex	Private Mental Hospitals									
	First Admissions 2/					Resident Patients 3/				
	Total under 18 years	Under 5 years	5-9 years	10-14 years	15-17 years	Total under 18 years	Under 5 years	5-9 years	10-14 years	15-17 years
Total Patients	3,033	13	105	836	2,079	1,440	15	86	510	829
Acute and chronic brain syndromes	160	3	21	57	79	252	-	30	119	103
Convulsive disorder	41	1	4	12	24	33	-	6	15	12
Psychotic disorders	730	1	15	163	551	319	-	14	92	213
Schizophrenic reactions	572	1	10	125	436	284	-	12	84	188
Psychophysiologic disorders	14	-	-	5	9	5	-	-	2	3
Psychoneurotic disorders	504	-	12	125	367	143	11	4	43	85
Anxiety reaction	108	-	2	31	75	36	-	-	17	19
Psychoneurotic depressive reaction	266	-	3	49	214	55	2	2	13	38
Personality disorders	641	3	25	171	442	375	1	21	152	201
Personality pattern disturbance	177	-	2	54	121	91	-	6	34	51
Personality trait disturbance	266	1	20	65	180	222	1	14	98	109
Passive aggressive personality	142	-	17	38	87	165	1	11	76	77
Transient situational personality dis.	796	3	13	249	531	217	-	9	62	146
Mental deficiency	52	2	10	22	18	57	-	4	23	30
Without mental disorder	17	1	4	5	7	2	-	1	-	1
Undiagnosed	119	-	5	39	75	70	3	3	17	47
Total Male	1,582	8	78	467	1,029	877	9	61	350	457
Acute and chronic brain syndromes	109	2	17	38	52	177	-	24	80	73
Convulsive disorder	22	-	3	9	10	17	-	3	9	5
Psychotic disorders	357	-	9	78	270	184	-	6	60	118
Schizophrenic reactions	299	-	5	69	225	167	-	5	55	107
Psychophysiologic disorders	1	-	-	1	-	-	-	-	-	-
Psychoneurotic disorders	226	-	7	67	152	90	9	3	31	47
Anxiety reaction	61	-	1	20	40	27	-	-	16	11
Psychoneurotic depressive reaction	107	-	2	24	81	33	-	2	9	22
Personality disorders	382	2	22	108	250	256	-	18	120	118
Personality pattern disturbance	99	-	-	36	63	67	-	4	27	36
Personality trait disturbance	161	-	19	44	98	151	-	13	75	63
Passive aggressive personality	107	-	16	30	61	126	-	10	64	52
Transient situational personality dis.	401	1	11	135	254	109	-	5	38	66
Mental deficiency	44	2	6	19	17	37	-	2	14	21
Without mental disorder	7	1	3	1	2	1	-	1	-	-
Undiagnosed	55	-	3	20	32	23	-	2	7	14
Total Female	1,451	5	27	369	1,050	563	6	25	160	372
Acute and chronic brain syndromes	51	1	4	19	27	75	-	6	39	30
Convulsive disorder	19	1	1	3	14	16	-	3	6	7
Psychotic disorders	373	1	6	85	281	135	-	8	32	95
Schizophrenic reactions	273	1	5	56	211	117	-	7	29	81
Psychophysiologic disorders	13	-	-	4	9	5	-	-	2	3
Psychoneurotic disorders	278	-	5	58	215	53	2	1	12	38
Anxiety reaction	47	-	1	11	35	9	-	-	1	8
Psychoneurotic depressive reaction	159	-	1	25	133	22	2	-	4	16
Personality disorders	259	1	3	63	192	119	1	3	32	83
Personality pattern disturbance	78	-	2	18	58	24	-	2	7	15
Personality trait disturbance	105	1	1	21	82	71	1	1	23	46
Passive aggressive personality	35	-	1	8	26	39	1	1	12	25
Transient situational personality dis.	395	2	2	114	277	108	-	4	24	80
Mental deficiency	8	-	4	3	1	20	-	2	9	9
Without mental disorder	10	-	1	4	5	1	-	-	-	1
Undiagnosed	64	-	2	10	43	47	3	1	10	33

1/ Provisional data.

2/ Includes data from 152 of 174 known hospitals.

3/ Includes data from 148 of 174 known hospitals reporting as of December 31.

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Table 4

Person Interviewed, by Age of Patient, Total and Treated Adolescent Patients Terminated from 754 Outpatient Psychiatric Clinics, United States, 1962

Person seen (interviewed)	Total	Age at admission				
		10-11 years	12-13 years	14-15 years	16-17 years	18-19 years
Total number of patients	51,537	11,759	11,546	12,990	8,809	6,433
Percent of patients by interviews with:						
Patients only	22.1	9.9	12.7	17.9	28.7	61.2
Patient, parent(s) only	50.6	60.7	57.4	52.3	45.6	23.8
Patient, parent(s), others	11.9	13.4	13.8	13.1	11.0	4.7
Patient, others only	5.7	3.5	4.7	6.4	7.2	8.1
Parent(s), others only	.7	.8	.7	.7	.6	.2
Parent(s) only	8.7	11.6	10.5	9.3	6.6	1.8
Others only	.2	.1	.2	.3	.3	.2
Number of treated patients	16,756	3,734	3,573	3,743	2,971	2,735
Percent of patients by interviews with:						
Patients only	21.1	4.8	7.9	14.1	28.6	62.0
Patient, parent(s) only	59.3	73.5	70.3	65.8	52.9	23.6
Patient, parent(s), others	14.6	18.4	18.2	15.6	12.6	5.6
Patient, others only	4.0	1.9	2.4	3.6	5.2	8.5
Parent(s), others only	.2	.2	.3	.1	.1	.1
Parent(s) only	.7	1.1	.8	.6	.4	.3
Others only	.1	.1	.1	.2	.2	-

Source: Adolescent Patients Served in Outpatient Psychiatric Clinics (Table 3) by B.M. Rosen, A.K. Bahn, R. Shellow and E.M. Bower. American Journal of Public Health 55: 1563-1577, October 1965.

Table 5

Number and Location of Psychiatric Facilities in the United States, 1966[1]

STATE	Number of Known Psychiatric Facilities				
	Outpatient Psychiatric Clinics [2]	State and County Mental Hospitals	Private Mental Hospitals	General Hospital Inpatient Psychiatric Facilities	Psychiatric Day/Night Units[3]
United States	2079	298	174	888	173
Alabama	25	2	1	11	0
Alaska	3	2	-	6	1
Arizona	12	1	2	5	2
Arkansas	7	2	-	5	0
California	189	12	25	56	28
Colorado	25	2	3	11	4
Connecticut	50	4	7	14	8
Delaware	11	2	-	3	1
District of Columbia	21	1	-	6	4
Florida	33	4	5	31	1
Georgia	28	2	5	10	0
Hawaii	14	1	-	6	1
Idaho	3	2	-	4	0
Illinois	117	14	10	56	9
Indiana	27	9	2	32	2
Iowa	26	6	1	16	1
Kansas	34	3	2	17	3
Kentucky	24	4	3	10	3
Louisiana	29	3	1	12	3
Maine	17	3	1	5	0
Maryland	78	7	7	9	7
Massachusetts	125	13	11	31	14
Michigan	82	10	10	33	6
Minnesota	29	8	-	28	4
Mississippi	6	2	-	4	1
Missouri	39	7	3	19	3
Montana	5	1	-	6	0
Nebraska	10	4	1	11	2
Nevada	5	1	-	5	0
New Hampshire	30	1	-	4	0
New Jersey	78	12	4	28	1
New Mexico	4	1	1	3	1
New York	392	24	19	58	13
North Carolina	43	4	3	12	1
North Dakota	2	1	-	7	0
Ohio	77	21	4	43	12
Oklahoma	11	4	1	16	3
Oregon	29	3	1	12	2
Pennsylvania	137	20	16	58	14
Rhode Island	16	1	2	7	3
South Carolina	13	2	1	7	0
South Dakota	6	1	-	9	0
Tennessee	17	6	2	8	4
Texas	35	8	6	68	0
Utah	17	1	-	8	1
Vermont	1	1	1	5	0
Virginia	30	4	5	15	4
Washington	12	3	2	14	3
West Virginia	11	5	1	4	0
Wisconsin	38	42	5	33	2
Wyoming	6	1	-	7	1

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[1] Provisional data.

[2] Excludes clinics of the Veterans Administration.

[3] As of 1965.

TABLE 6

Rank Order Of States According To Number Of Scheduled Professional Man-Hours Per Week Per 100,000 Population, Outpatient Psychiatric Clinics, 1965

Rank	State	Total Clinics	Number of Clinics Reporting	Number of Man-Hours Per 100,000 Population
	Total United States			221[1]
1	District of Columbia	22	16	758
2	Massachusetts	122	121	626
3.	New York	380	373	451
4	Colorado	25	25	346
5	Kansas	34	32	323
6	Connecticut	49	49	314
7	Delaware	14	12	299
8	New Hampshire	27	27	297
9	Illinois	108	108	294
10	Rhode Island	16	16	288
11	Pennsylvania	141	141	274
12	Maryland	71	70	262
13	Hawaii	11	11	251
14	California	142	129	245
15	Michigan	60	57	225
16	Minnesota	27	26	224
17	Louisiana	29	28	218
18	New Jersey	80	78	204
19	Iowa	29	25	182
20	Ohio	78	72	168
21	Missouri	41	37	164
22	Wisconsin	34	34	161
23	Florida	37	36	153
24	Oregon	22	21	145
25	Virginia	30	29	138
26	Indiana	27	27	137
27	Wyoming	6	5	132
28	Vermont	7	7	126
29	Utah	18	13	125
30	Kentucky	30	27	124
31	Arizona	8	7	118
32	Oklahoma	24	24	116
33	New Mexico	5	5	115
34	Alaska	3	3	113
35	Nebraska	11	9	106
36	North Carolina	38	28	104
37	Washington	13	12	98
38	Tennessee	15	15	91
39	Georgia	23	23	89
40	South Dakota	6	6	85
41	Texas	41	40	78
42	Montana	5	5	77
43	Alabama	25	25	76
44	Maine	10	10	72
45	Arkansas	8	8	70
46	South Carolina	11	11	60
47	Nevada	5	5	58
48	North Dakota	3	2	45
49	West Virginia	13	9	41
50	Idaho	3	3	25
51	Mississippi	7	7	23

[1] Data based on reports from 1919 clinics including 65 clinics of the Veterans Administration, Puerto Rico and Virgin Islands.

Source: Outpatient Psychiatric Clinics, Data on Staff and Man-Hours, 1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

Table 7

Distribution of Rural Clinics for Children and Rural Clinic Population by Geographic Region and State, 1965 1/

Geographic Region and State	Number of Rural Clinics Serving Children	Rural Clinic Population under 18 Years of Age 2/	
		Number	Percent of Total Clinic Population under 18 Years
Total United States 3/	234	25,004	8.4
Northeast	89	8,705	6.0
Connecticut	2	102	1.9
Maine	1	90	12.6
Massachusetts	3	279	2.4
New Hampshire	3	522	30.0
New Jersey	3	654	4.3
New York	57	6,380	6.9
Pennsylvania	14	678	4.1
2 other States	6	---	---
North Central	60	7,231	12.3
Iowa	9	928	24.8
Kansas	5	287	9.1
Michigan	5	1,324	9.0
Minnesota	10	2,337	41.2
Missouri	6	254	6.2
Ohio	6	899	7.4
Wisconsin	8	1,202	20.6
5 other States	11	---	---
South	63	6,905	11.3
Alabama	3	178	5.5
Florida	2	321	3.2
Georgia	1	5	0.2
Kentucky	7	430	14.1
Louisiana	5	703	10.9
Maryland	11	970	17.7
Mississippi	2	287	30.9
North Carolina	18	2,417	39.6
South Carolina	4	987	48.0
Tennessee	2	307	8.5
Virginia	2	117	1.8
West Virginia	4	183	16.1
5 other States	2	---	---
West	22	2,163	6.5
California	7	1,032	5.5
Colorado	3	280	6.4
Hawaii	1	110	10.6
Nevada	1	174	34.3
Oregon	4	527	13.2
Wyoming	1	40	2.1
7 other States	5	---	---

1/ Includes clinics located in counties which were 50% or more rural in the 1960 Census of Population.

2/ Excludes rural children who are seen in urban clinics.

3/ Estimated figures for clinics in some states.

Source: Rural Outpatient Mental Health Services for Children, 1965 (Table 2) by B.M. Rosen, NIMH, 1968.

Table 8

Percent of Psychiatric Day-Night Services Providing Specified Types of Treatment by Type of Unit, United States, 1965 1/

Treatments provided	Total day-night units	Other than Veterans Administration Units									Veterans Adminis-tration units
		Total	Day	Day and night, and night only	Affiliation			Age Group Served			
					Inpa-tient and out-patient	Hospital (mental, general, other)	All other 3/	Children only 4/	Adults only 5/	Children and adults only 6/	
Total services reporting	174 2/	152	121	31	94	32	26	28	80	44	22
Percent providing specified services:											
Diagnosis and/or observation only	58	60	61	58	62	56	62	68	56	64	36
Individual therapy	91	90	88	97	94	84	85	89	88	96	100
Group therapy	94	93	91	100	97	84	88	82	98	91	100
Family therapy	72	72	72	74	78	56	73	79	74	66	68
Chemotherapy	91	90	88	100	98	94	58	64	99	91	100
Somatic therapy	44	47	42	68	52	59	15	11	50	66	18
Occupational therapy	93	92	90	100	95	97	77	71	98	96	100
Recreational therapy	93	92	91	97	97	100	65	79	95	96	100
Vocational counseling	54	49	46	61	52	53	35	18	54	61	86
Educational therapy	62	59	58	64	60	53	65	100	42	64	82
Other services	10	9	7	16	8	12	4	4	14	2	18

1/ Includes two units in Puerto Rico

2/ Excludes one unit which did not report this item.

3/ Includes independent units, those affiliated with outpatient clinics and others.

4/ Includes units serving children and adolescents.

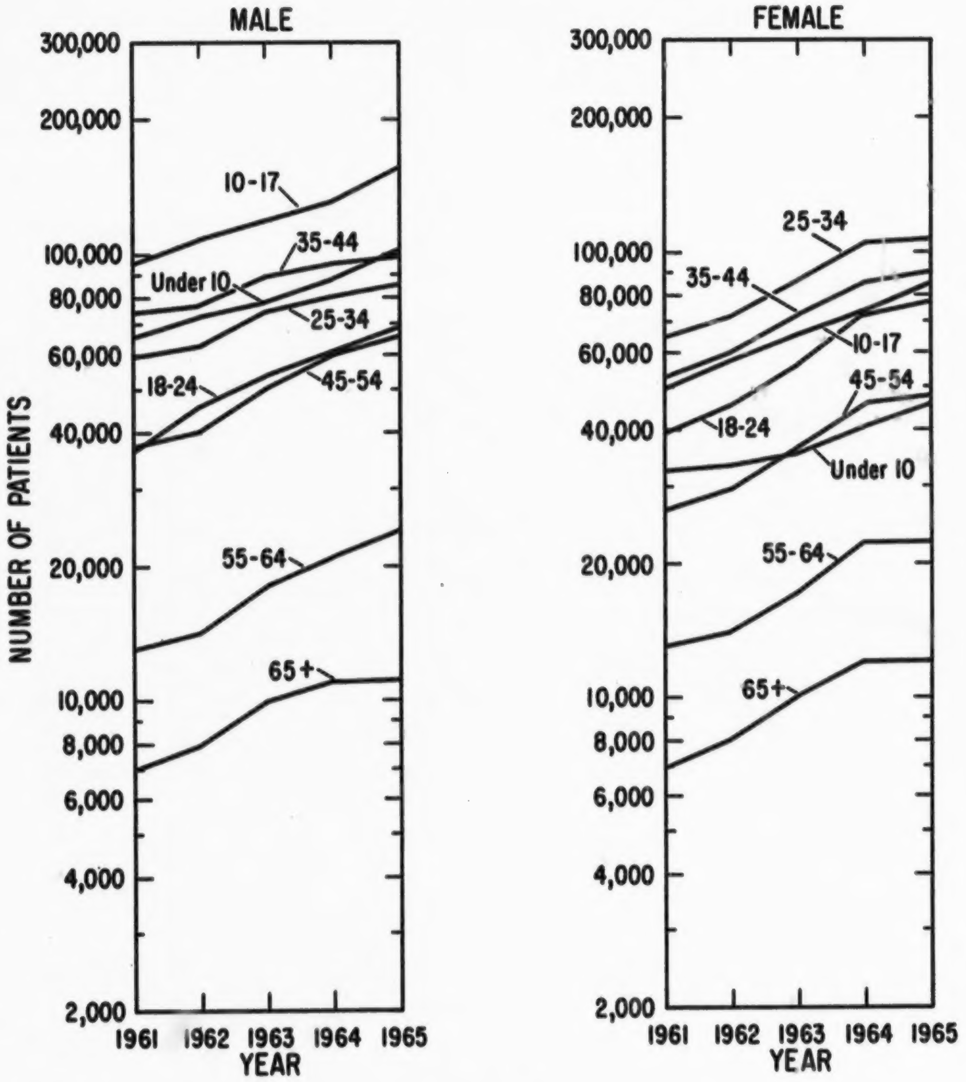
5/ Includes units serving adolescents and adults; adolescents, adults and aged; adults and aged; one unit which serves 60 and over only.

6/ Units have no restrictions at all. Includes 4 who do not serve children under 3, 6 or 10 years of age.

Source: A Survey of Psychiatric Day-Night Services in the United States, 1965 (Table 2) by S.G. Willner and B.M. Rosen, NIMH, April 1967.

FIGURE 1a

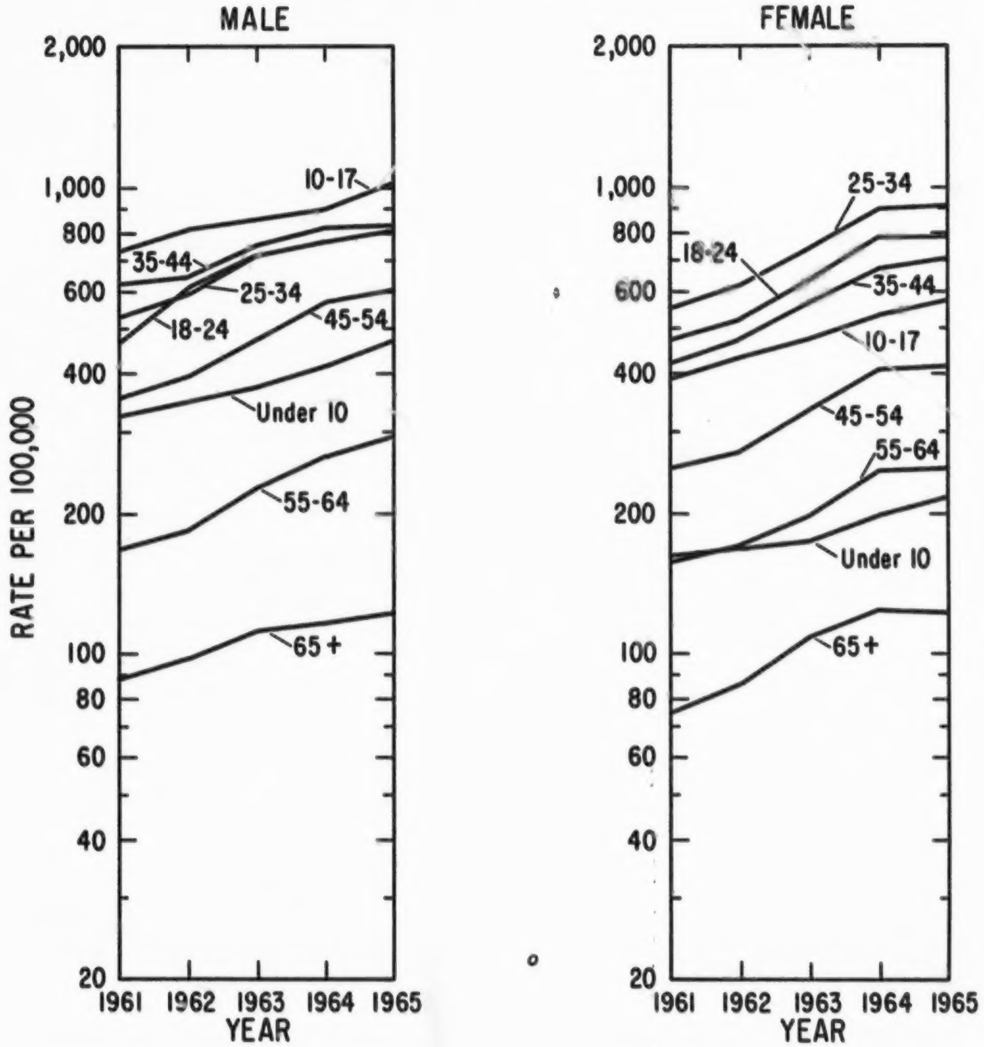
ESTIMATED NUMBER OF PATIENTS UNDER CARE DURING THE YEAR, OUTPATIENT PSYCHIATRIC CLINICS, BY AGE AND SEX, UNITED STATES, 1961-1965



Source: Outpatient Psychiatric Clinics, Annual Statistical Report, Data on Patients, 1961-1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

FIGURE 1b

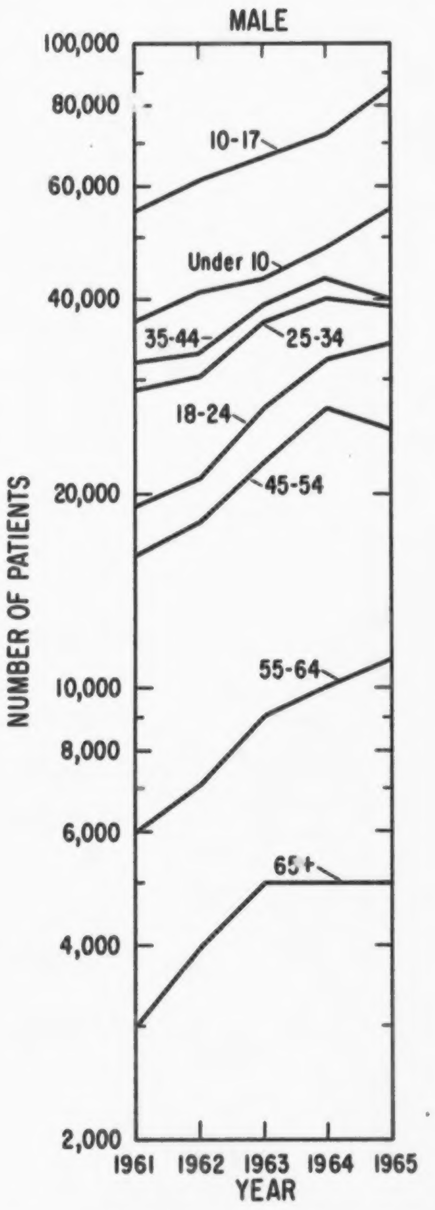
PATIENTS UNDER CARE DURING THE YEAR, PER 100,000 POPULATION, OUTPATIENT PSYCHIATRIC CLINICS, BY AGE AND SEX, UNITED STATES, 1961-1965



Source: Outpatient Psychiatric Clinics, Annual Statistical Report, Data on Patients, 1961-1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

FIGURE 2a

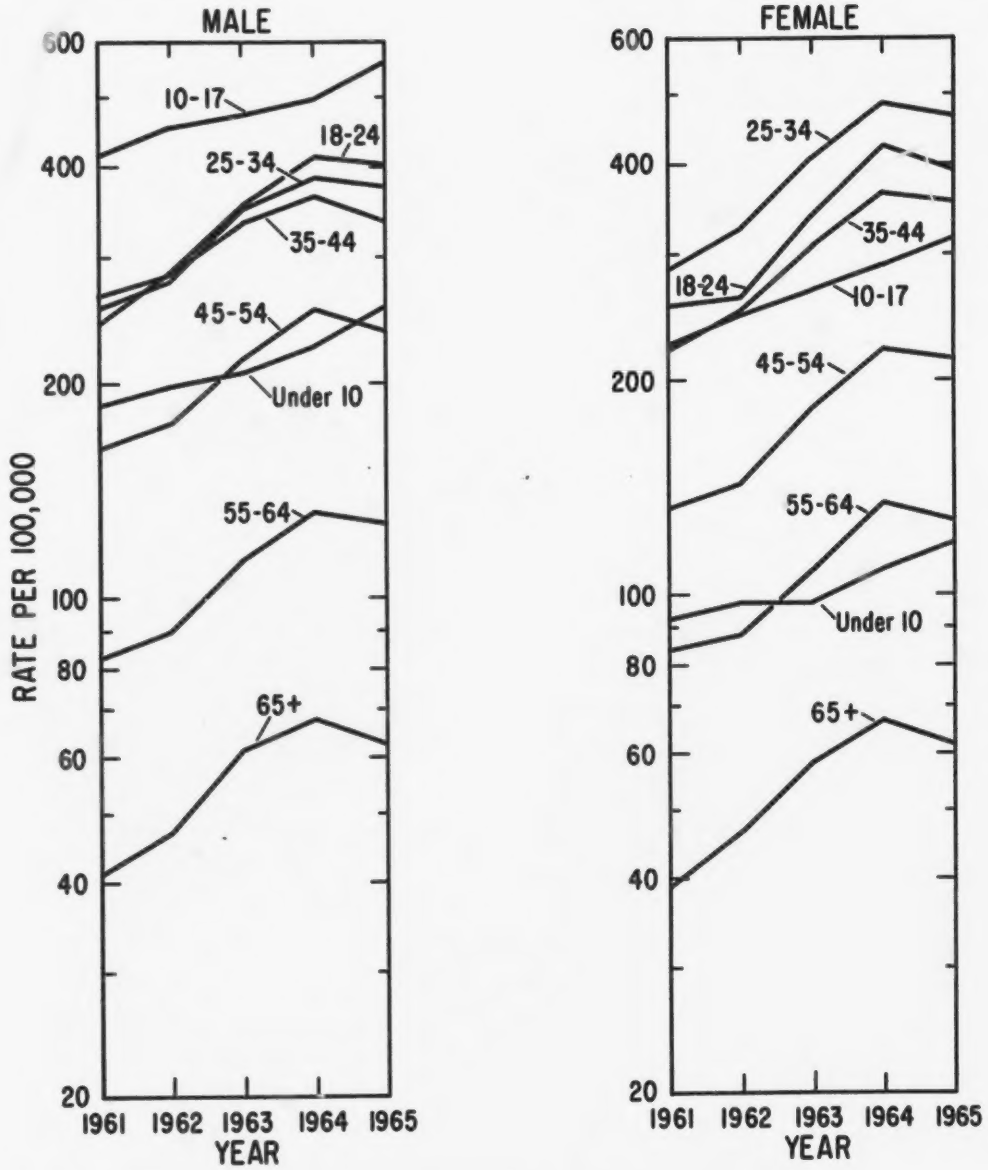
ESTIMATED NUMBER OF TERMINATIONS FROM OUTPATIENT PSYCHIATRIC CLINICS, BY AGE AND SEX, UNITED STATES, 1961 - 1965



Source: Outpatient Psychiatric Clinics, Annual Statistical Report, Data on Patients, 1961 - 1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

FIGURE 2b

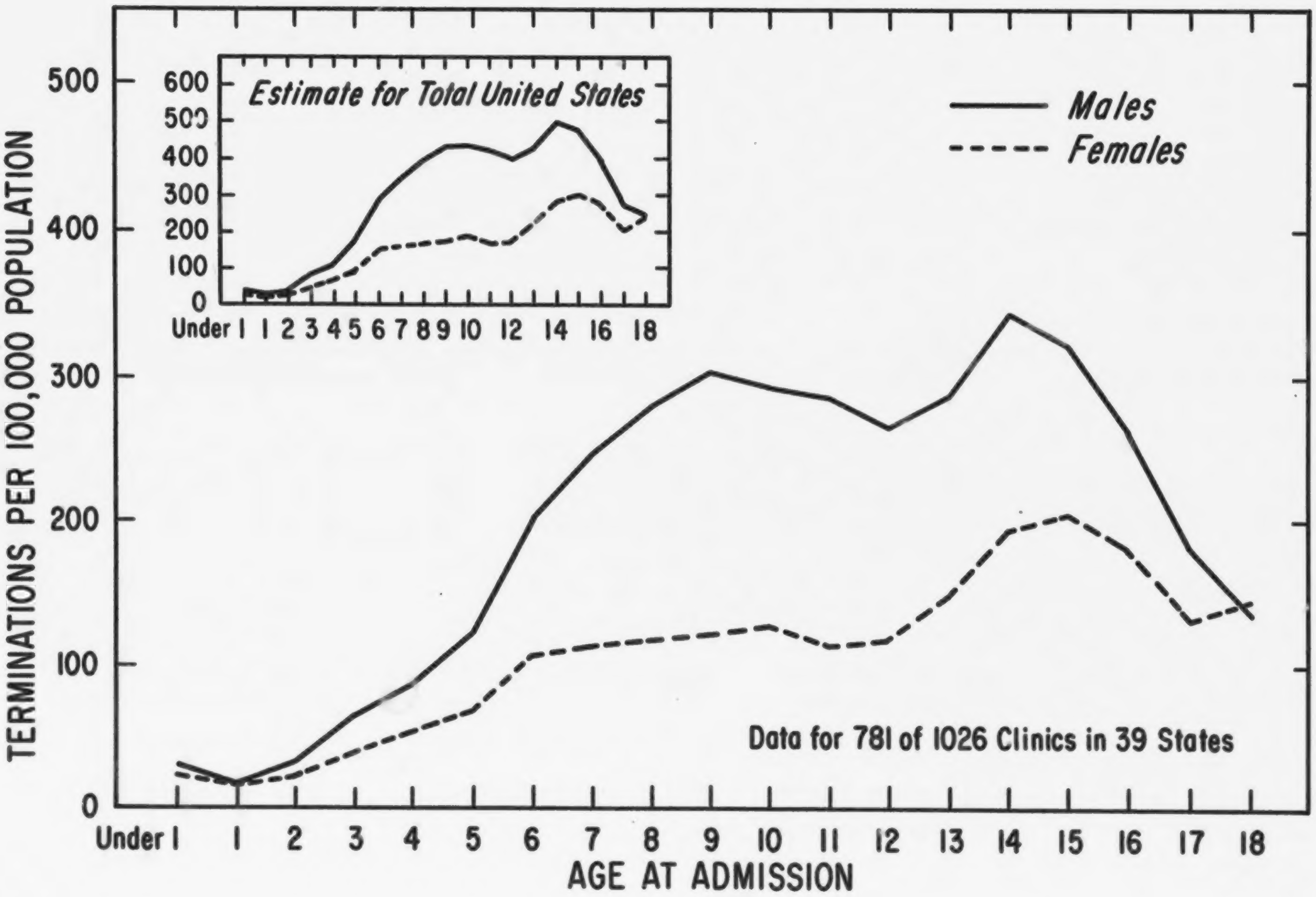
TERMINATION RATES FROM OUTPATIENT PSYCHIATRIC CLINICS, BY AGE AND SEX, UNITED STATES, 1961-1965



Source: Outpatient Psychiatric Clinics, Annual Statistical Report, Data on Patients, 1961 - 1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

FIGURE 3

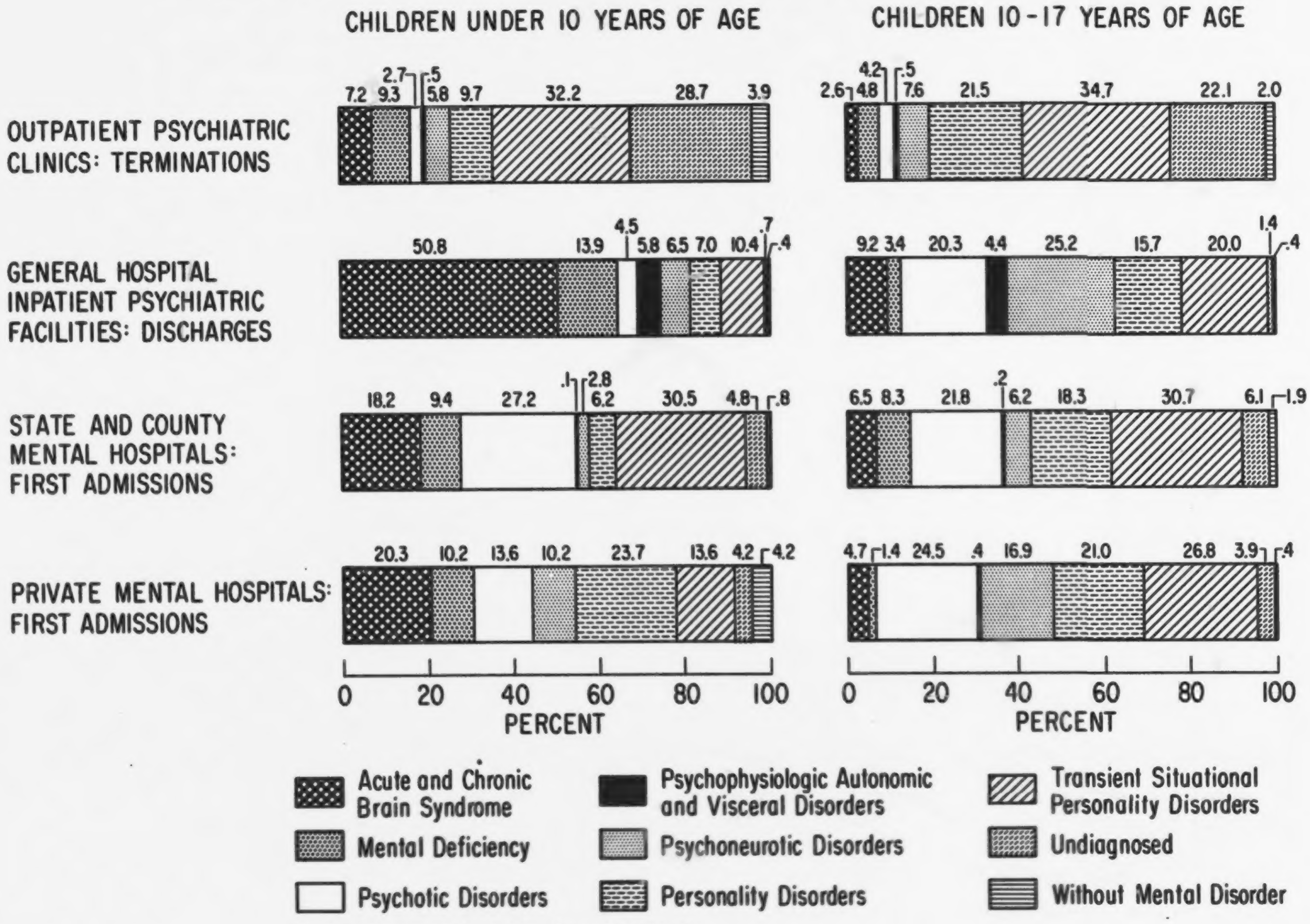
CLINIC TERMINATION RATES BY SINGLE YEARS OF AGE AND SEX, PATIENTS UNDER 18 YEARS OF AGE, 1961



Source: Demographic and Diagnostic Characteristics of Psychiatric Clinic Outpatients in the United States, 1961 (Figure 3) by B.M. Rosen, A.K. Bahn and M. Kramer. American Journal of Orthopsychiatry 34: 455-468, April 1964.

FIGURE 4a

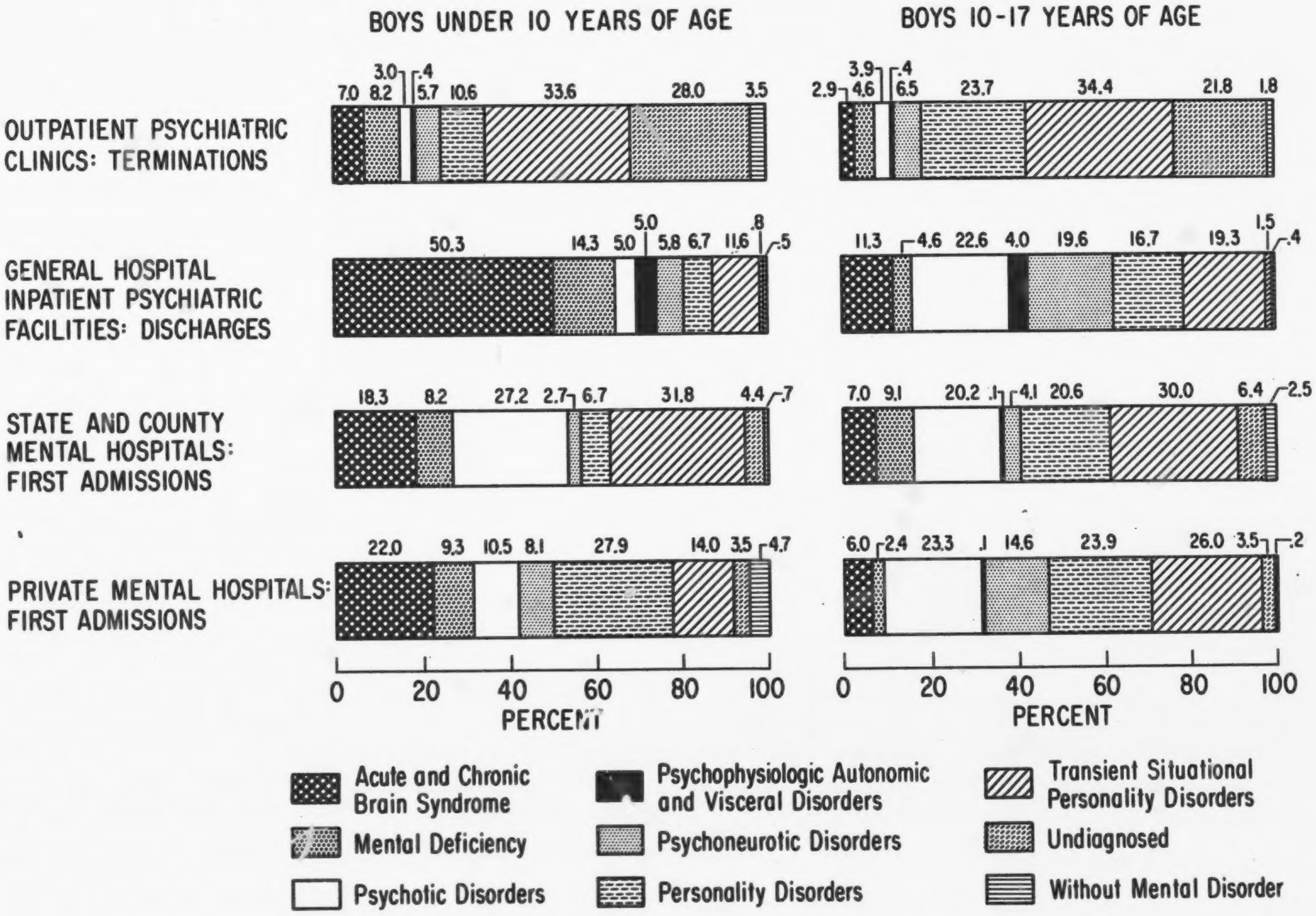
PERCENT DISTRIBUTION OF CHILDREN UNDER 10 AND 10-17 YEARS OF AGE, BY DIAGNOSIS, AND FOR TYPE OF PSYCHIATRIC FACILITY IN WHICH SERVED, UNITED STATES, 1966[1/]



[1/] Based on provisional data shown in Table 3.

FIGURE 4b

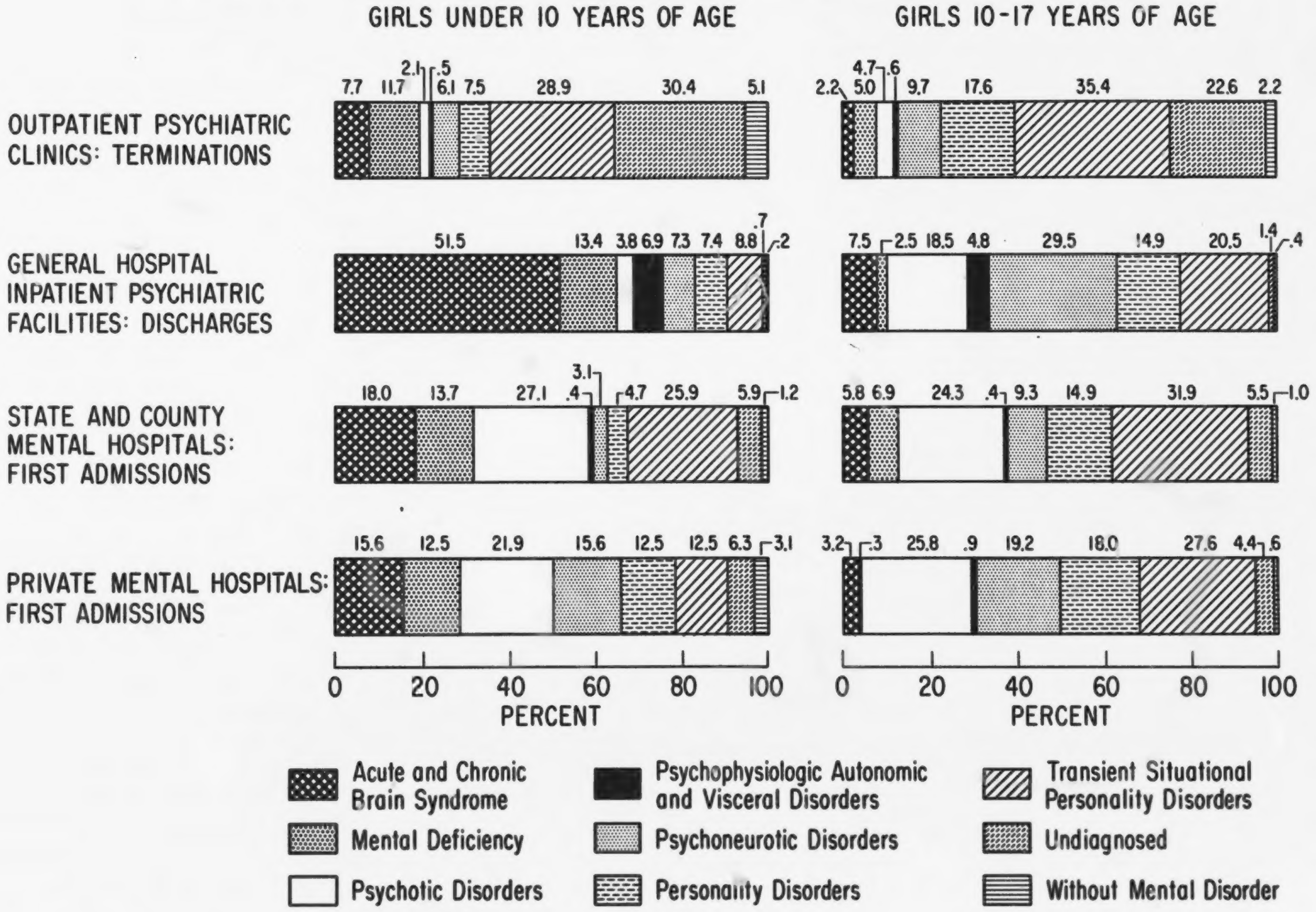
PERCENT DISTRIBUTION OF BOYS UNDER 10 AND 10-17 YEARS OF AGE, BY DIAGNOSIS, AND FOR TYPE OF PSYCHIATRIC FACILITY IN WHICH SERVED, UNITED STATES, 1966[1]



[1] Based on provisional data shown in Table 3.

FIGURE 4c

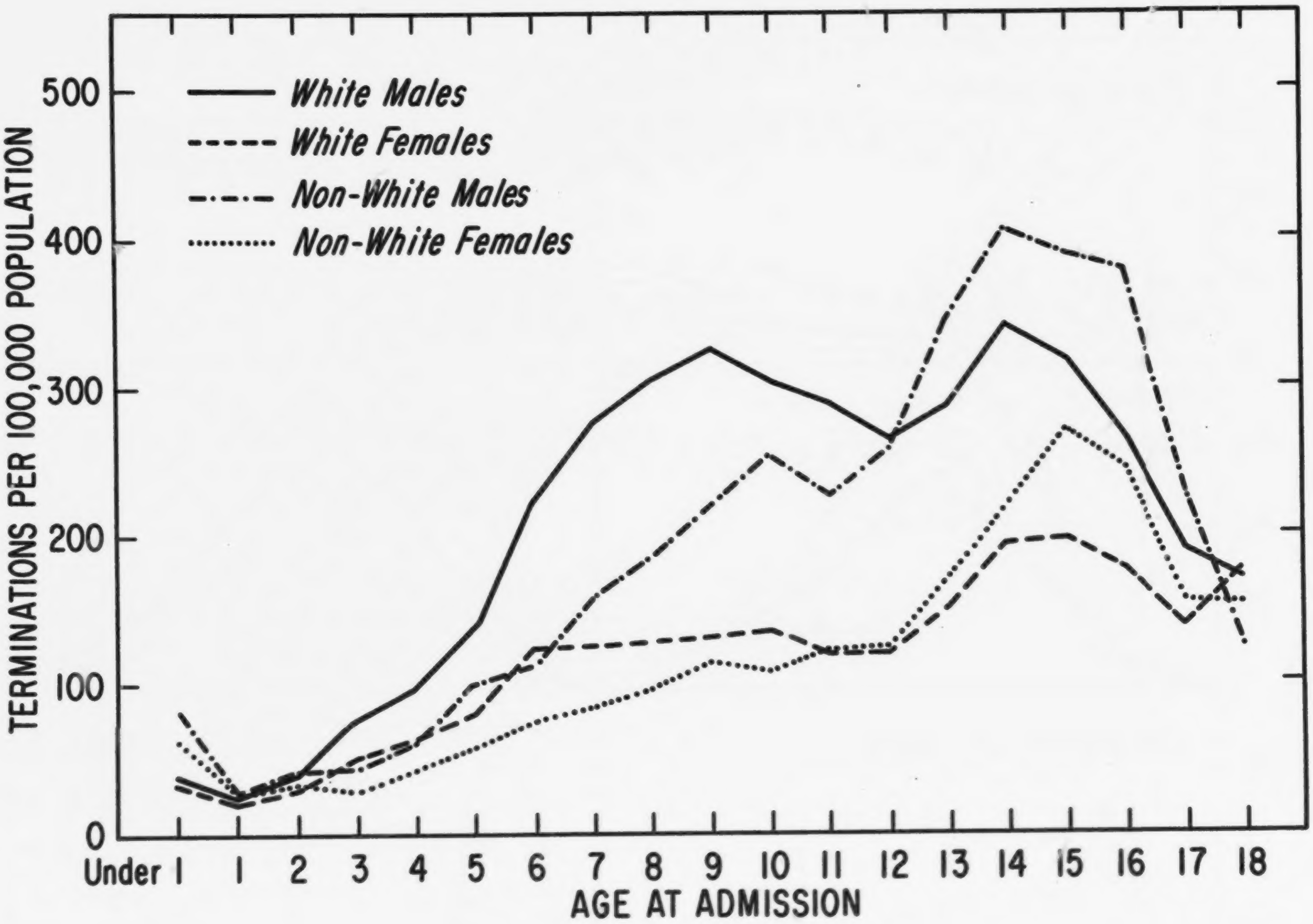
PERCENT DISTRIBUTION OF GIRLS UNDER 10 AND 10-17 YEARS OF AGE, BY DIAGNOSIS, AND FOR TYPE OF PSYCHIATRIC FACILITY IN WHICH SERVED, UNITED STATES, 1966[1/]



[1/] Based on provisional data shown in Table 3.

FIGURE 5

CLINIC TERMINATION RATES BY SINGLE YEARS OF AGE, SEX AND COLOR, PATIENTS UNDER 18 YEARS OF AGE, 1961 1/

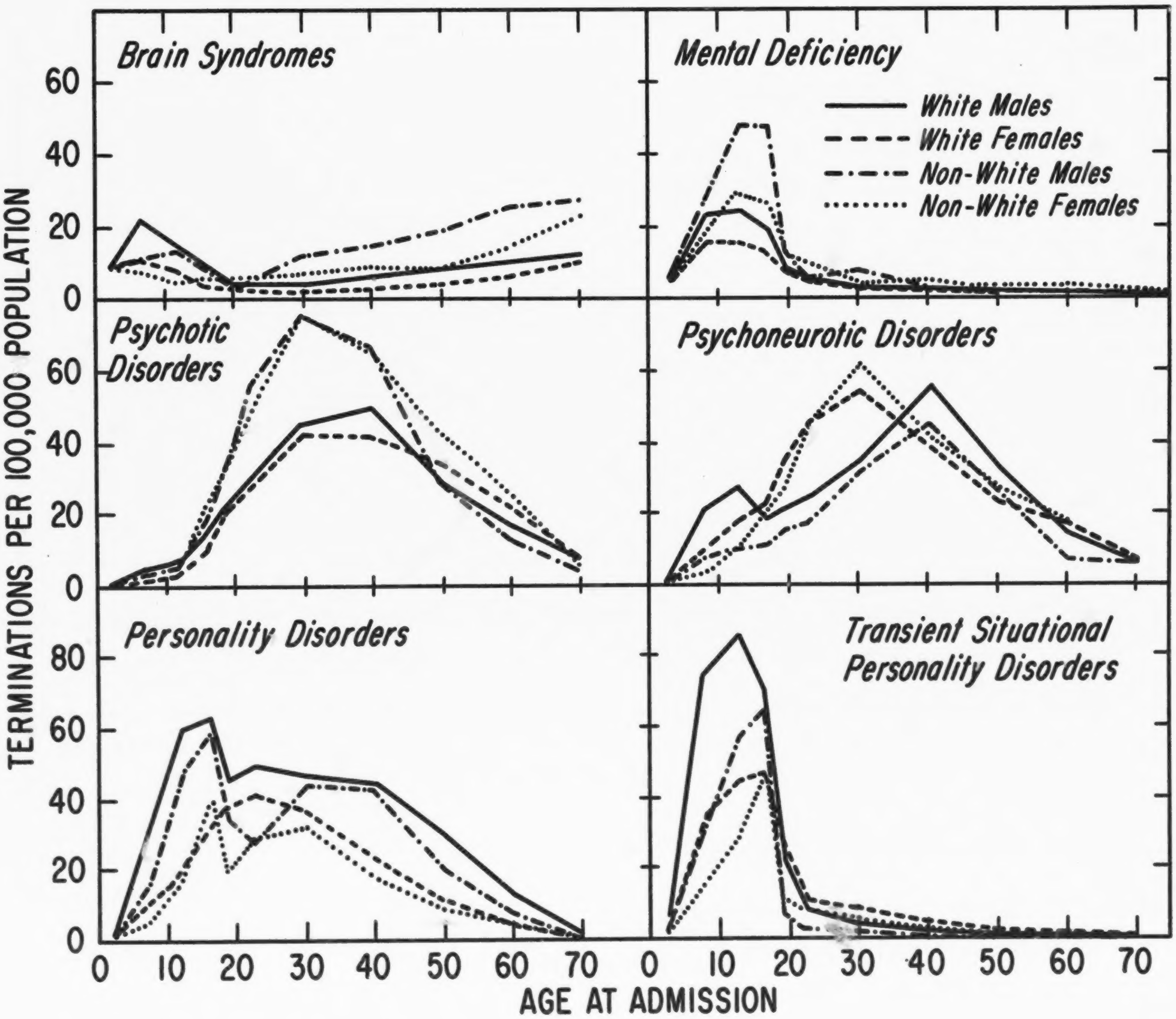


1/ Data for 525 of 616 clinics in 24 states.

Source: Demographic and Diagnostic Characteristics of Psychiatric Clinic Outpatients in the United States, 1961 (Figure 5) by B.M. Rosen, A.K. Bahn and M. Kramer. American Journal of Orthopsychiatry 34: 455-468, April 1964.

FIGURE 6

CLINIC TERMINATION RATES BY COLOR, AGE AND SEX, FOR EACH MAJOR PSYCHIATRIC DISORDER, 1961 [1]



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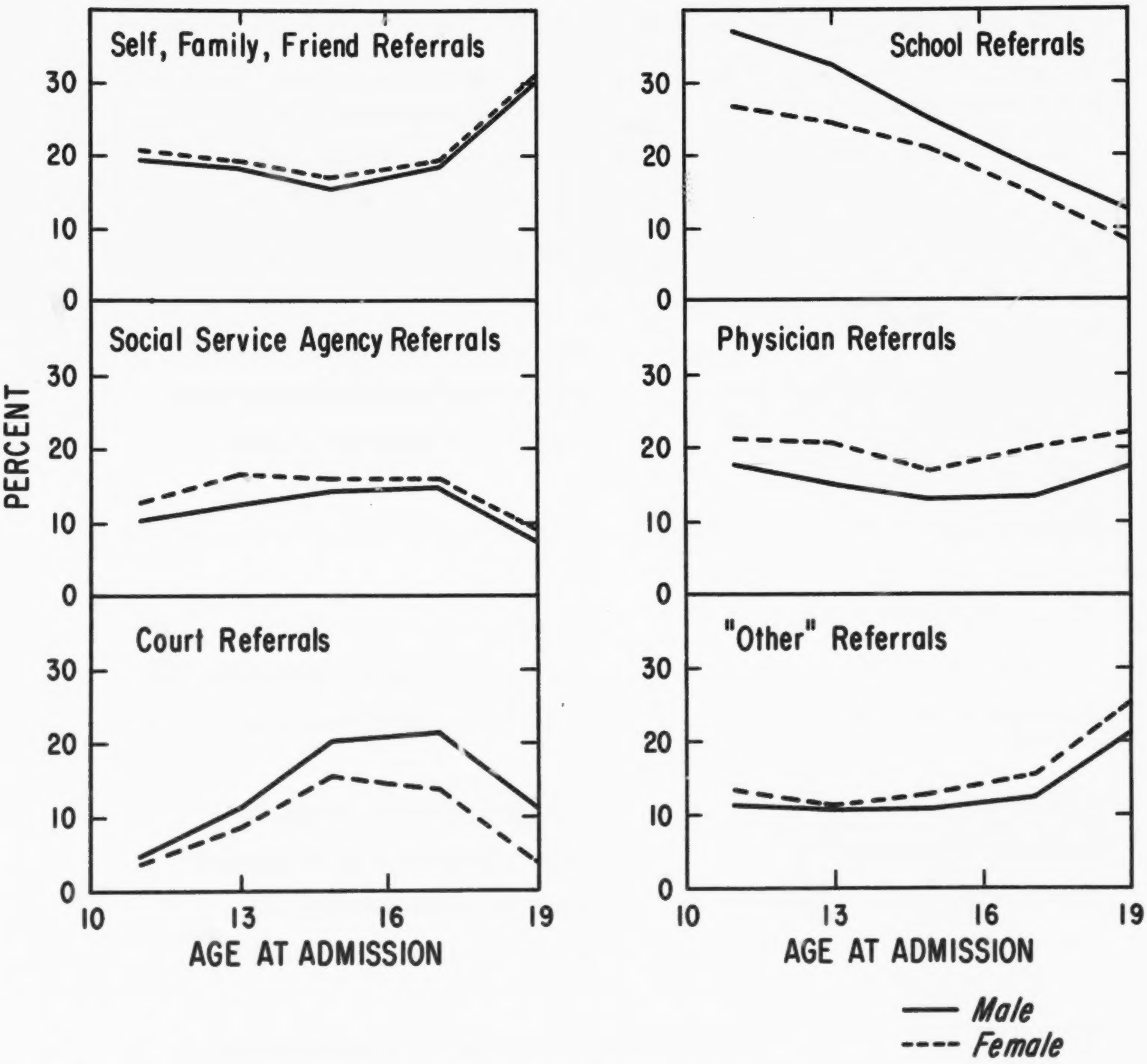
[1] Data for 579 of 682 clinics in 25 states.

Source: Demographic and Diagnostic Characteristics of Psychiatric Clinic Outpatients in the United States, 1961 (Figure 8) by B.M. Rosen, A.K. Bahn and M. Kramer. American Journal of Orthopsychiatry 34: 455-468, April 1964.

FIGURE 7

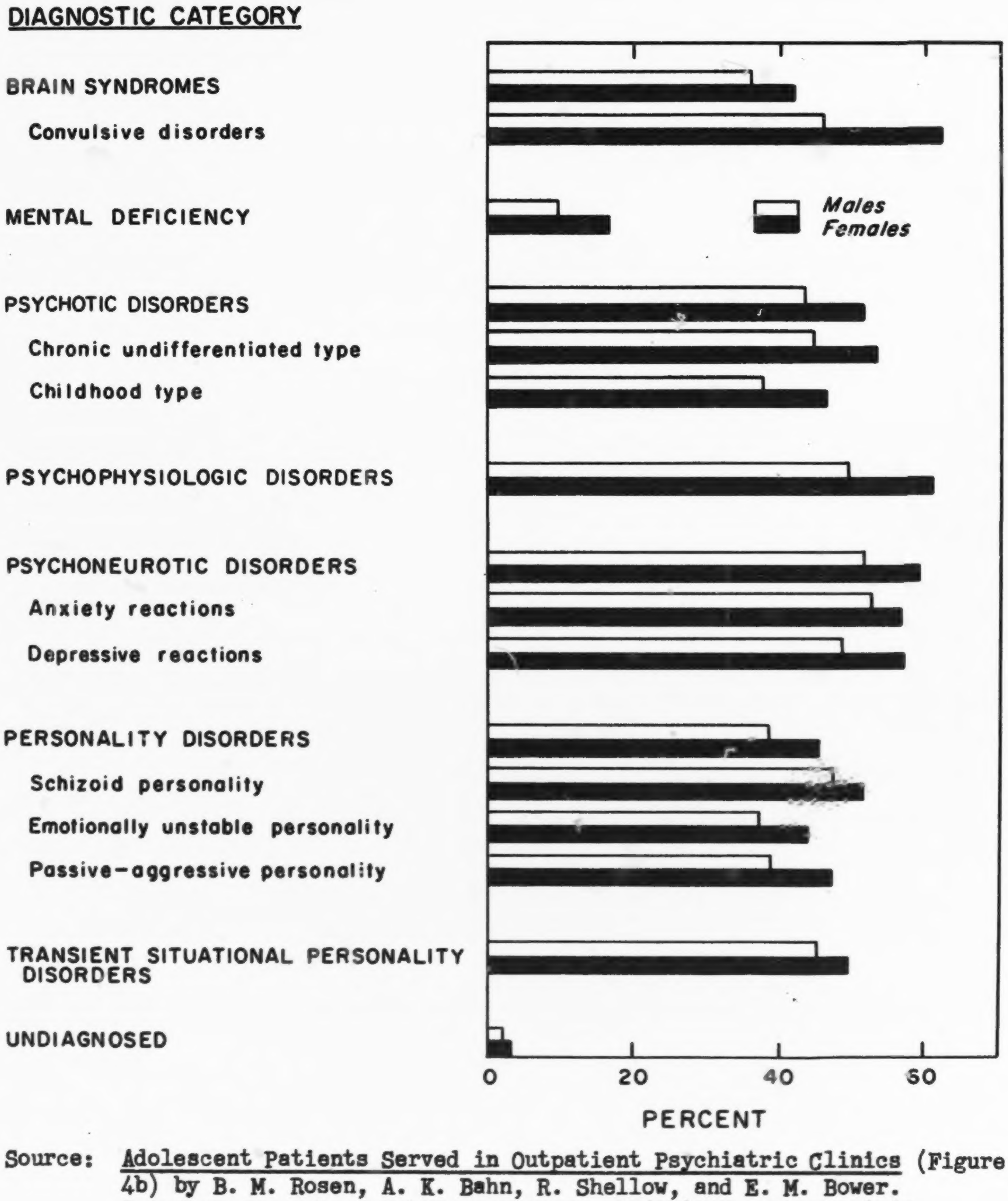
PERCENT DISTRIBUTION BY REFERRAL SOURCE, AGE AND SEX, ADOLESCENT PATIENTS TERMINATED FROM 780 OUTPATIENT PSYCHIATRIC CLINICS, UNITED STATES, 1962



Source: Adolescent Patients Served in Outpatient Psychiatric Clinics by B.M. Rosen, A.K. Bahn, R. Shellow and E.M. Bower. American Journal of Public Health 55: 1563 - 1577, October 1965.

FIGURE 8

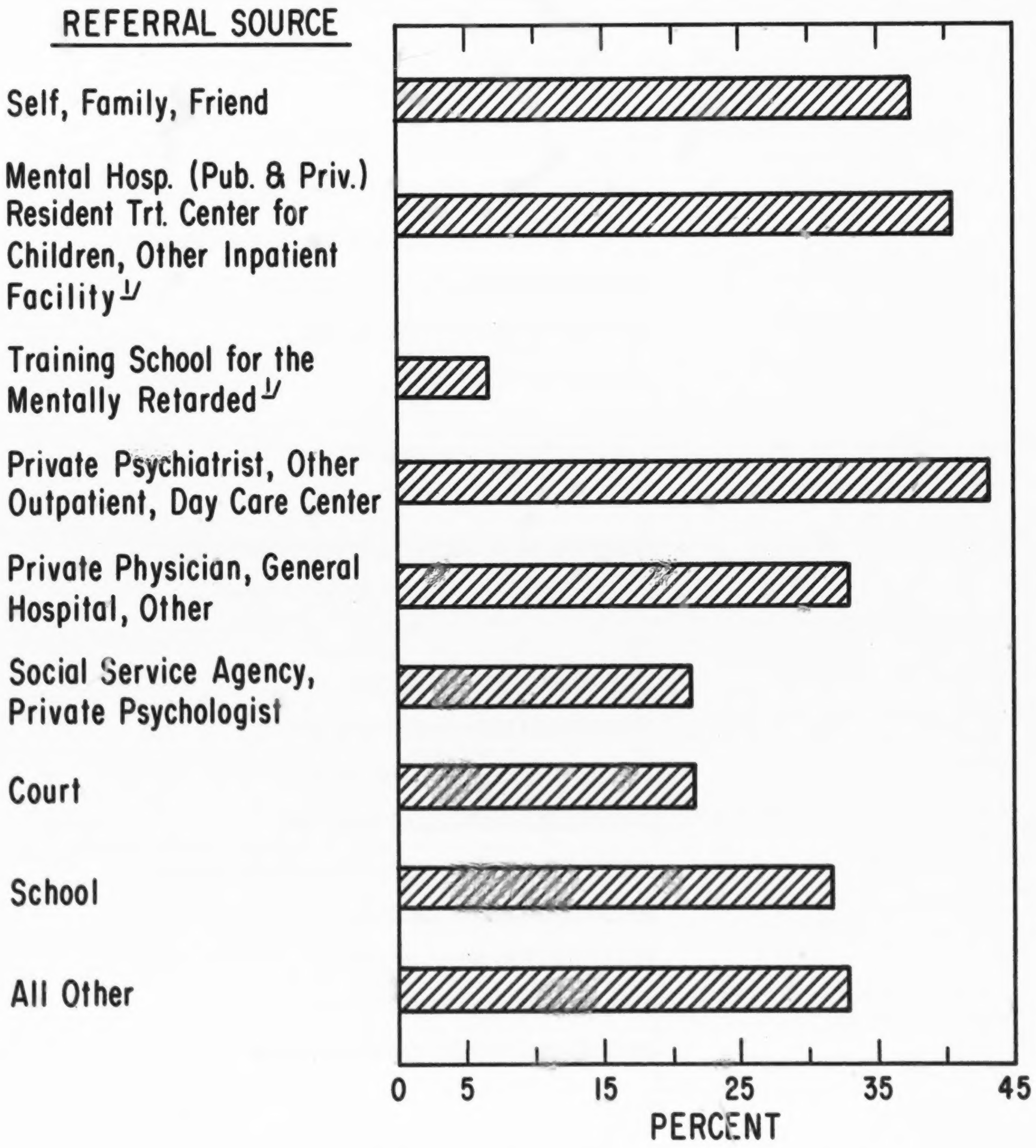
PERCENT OF PATIENTS WHO WERE TREATED, BY DIAGNOSTIC CATEGORY AND SEX, ADOLESCENT PATIENTS TERMINATED FROM 788 OUTPATIENT PSYCHIATRIC CLINICS, U.S., 1962



Source: Adolescent Patients Served in Outpatient Psychiatric Clinics (Figure 4b) by B. M. Rosen, A. K. Bahn, R. Shellow, and E. M. Bower. American Journal of Public Health 55: 1563-1577, October 1965.

FIGURE 9

PERCENT TREATED BY REFERRAL SOURCE FOR PATIENTS UNDER 18 YEARS OF AGE TERMINATED FROM 801 OUTPATIENT PSYCHIATRIC CLINICS, UNITED STATES, 1963

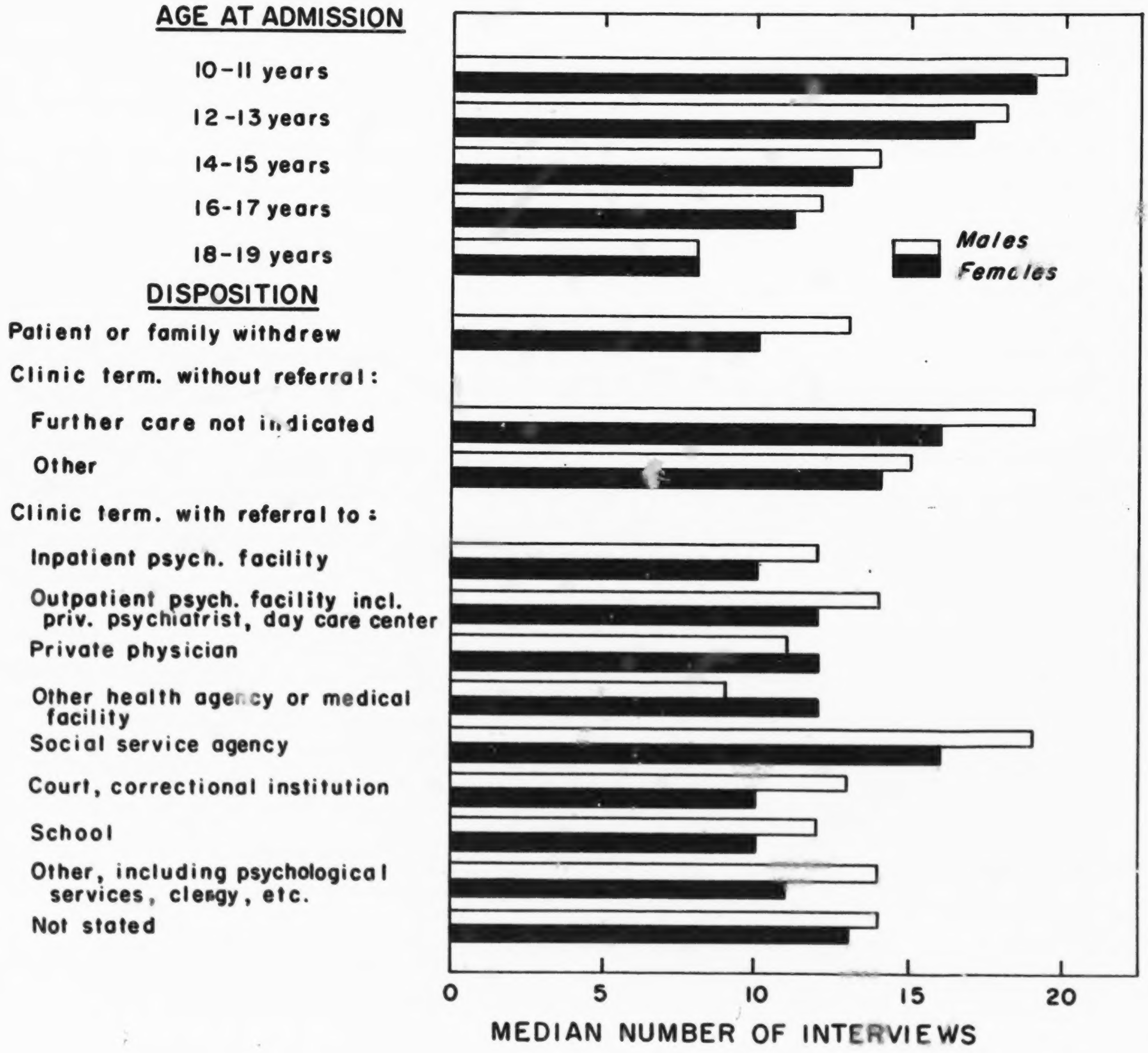


1/ Groups omitted if less than 25 patients were reported.

Source: A Nationwide Survey of Outpatient and Other Psychiatric Services to Two Diagnostic Groups, Mentally Deficient Children and Psychotic Adults, 1963 (Figure 2) by B.M. Rosen, A.K. Bahn, B.S. Brown and P.H. Person. NIMH, 1966.

FIGURE 10

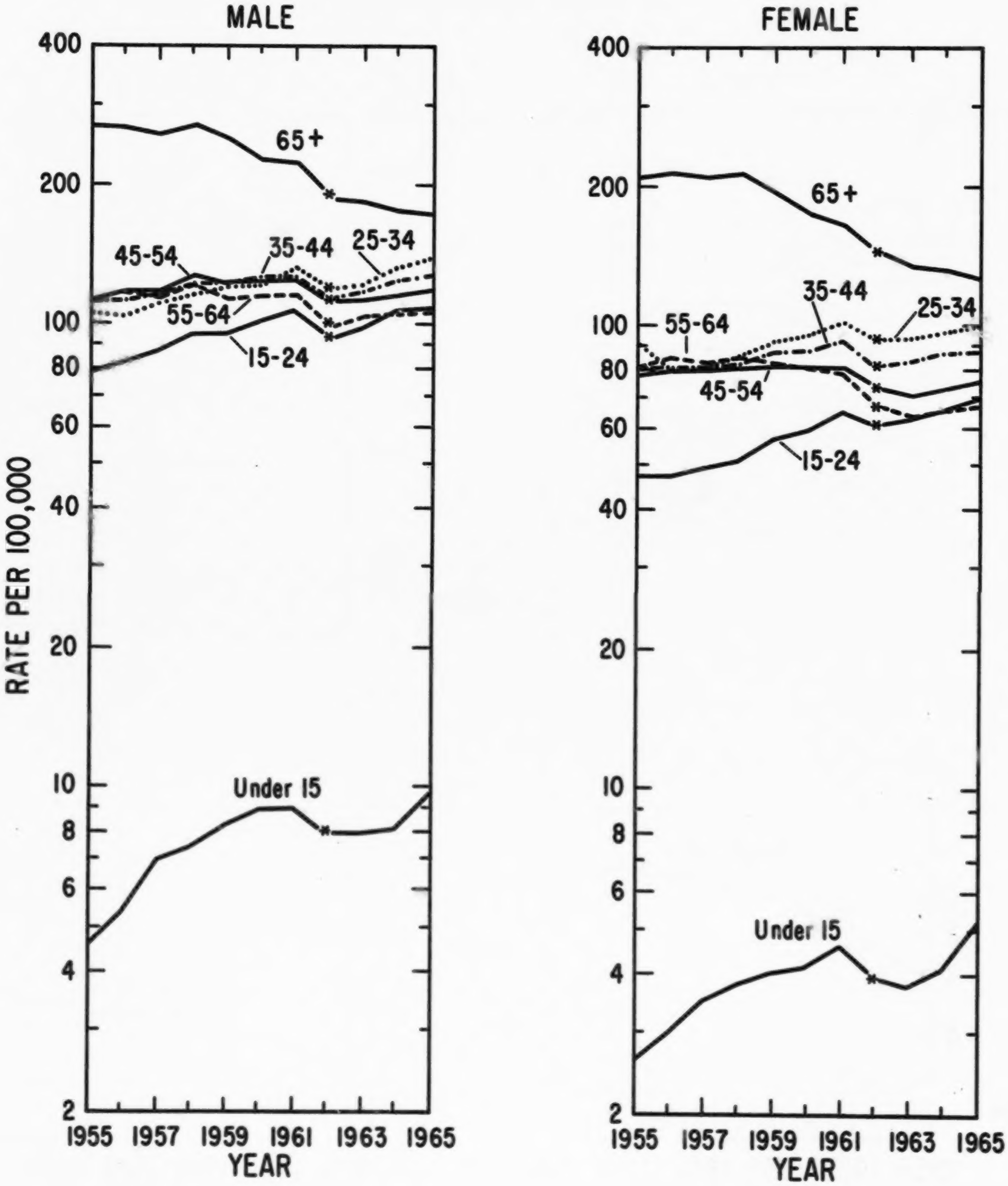
MEDIAN NUMBER OF PERSON-INTERVIEWS RECEIVED BY TREATED PATIENTS, BY AGE AND SEX AND BY DISPOSITION AND SEX, ADOLESCENT PATIENTS TERMINATED FROM 788 OUTPATIENT PSYCHIATRIC CLINICS, U.S., 1962



Source: Adolescent Patients Served in Outpatient Psychiatric Clinics (Figure 5) by B. M. Rosen, A. K. Bahn, R. Shellow and E. M. Bower. American Journal of Public Health 55: 1563-1577, October 1965.

FIGURE 11

FIRST ADMISSIONS PER 100,000 POPULATION,
IN STATE AND COUNTY MENTAL HOSPITALS,
BY AGE AND SEX, UNITED STATES, 1955-1965

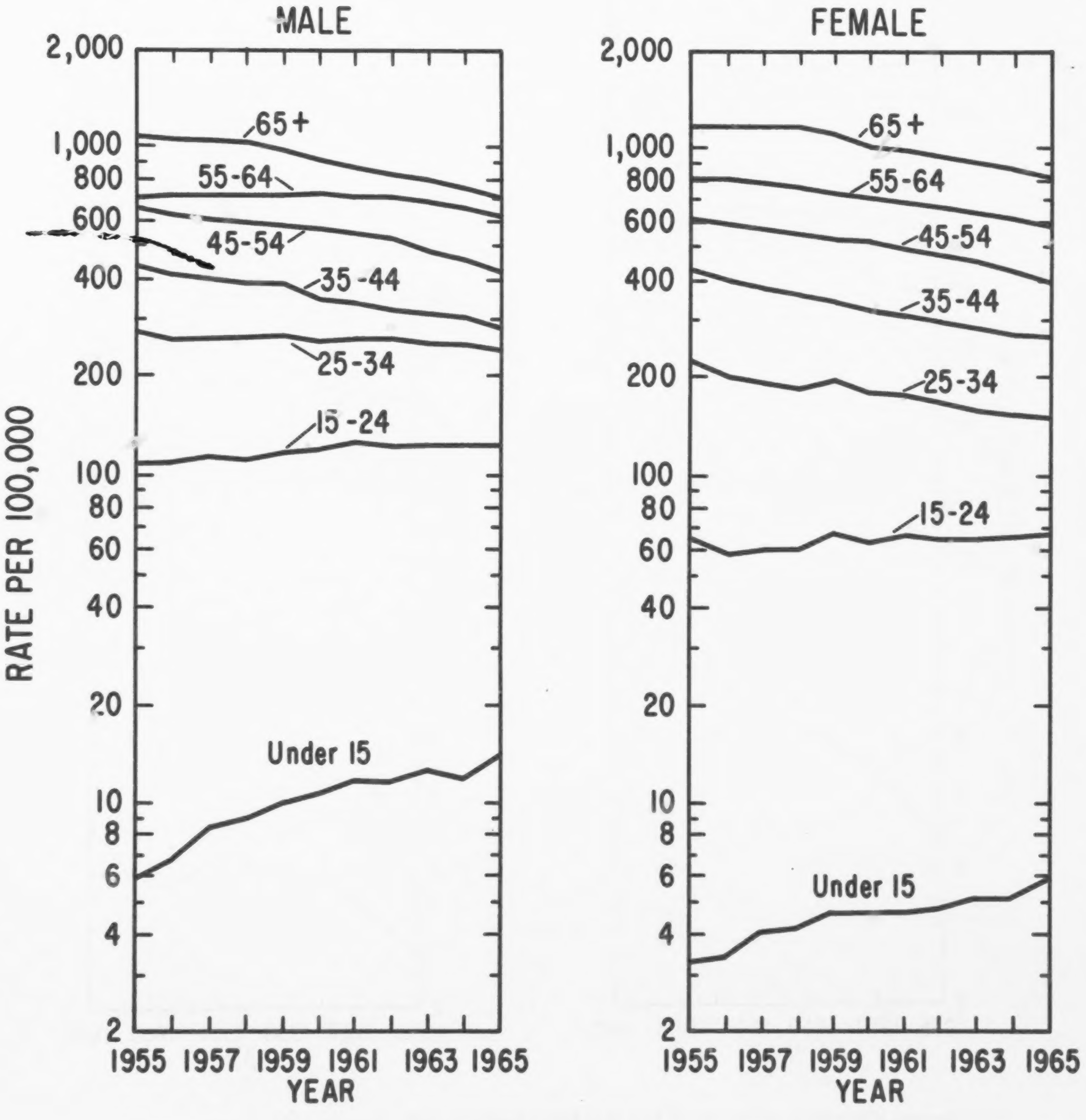


* This denotes a lowering of the trend line due to a change in definition in 1962.

Source: Patients in Mental Institutions, Part II, 1955-1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

FIGURE 12

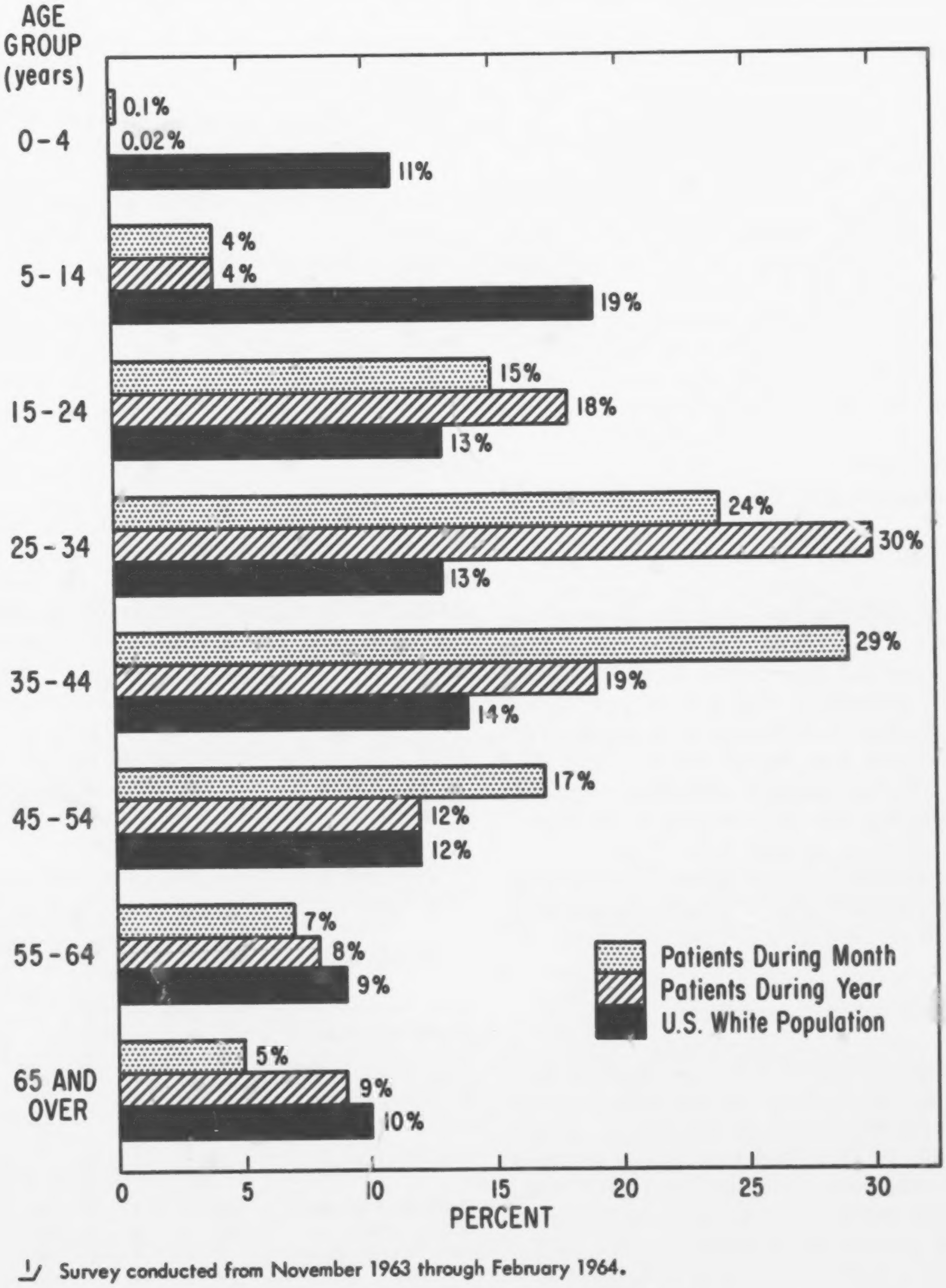
RESIDENT PATIENTS, PER 100,000 POPULATION, END OF YEAR, IN STATE AND COUNTY MENTAL HOSPITALS, BY AGE AND SEX, UNITED STATES, 1955-1965



Source: Patients in Mental Institutions, Part II, 1955-1965. U.S. Department of Health, Education, and Welfare, PHS, NIMH.

FIGURE 13

PERCENTAGE DISTRIBUTION OF PRIVATE PATIENTS SEEN DURING A SAMPLE MONTH AND ESTIMATED FOR THE YEAR BY AGE. COMPARED WITH UNITED STATES WHITE POPULATION [1]



[1] Survey conducted from November 1963 through February 1964.

Source: Survey of Private Psychiatric Practice (Figure 2) by A.K. Bahn, M. Conwell and P. Hurley. Archives of General Psychiatry 12: 295-302, March 1965.

SPECIAL STUDIES HIGHLIGHTING UTILIZATION PATTERNS

UTILIZATION OF SERVICES IN SMALL AREAS

This section will highlight findings from special studies based on data for small areas or individual States. Although utilization patterns of mental health facilities will differ from community to community and State to State depending largely on availability of psychiatric and other mental health services, findings of several studies conducted by or in collaboration with the Biometry Branch may provide some insight into the reasons for differences.

Louisiana—Maryland Socioeconomic Study

In a study of the socioeconomic and family characteristics of patients first admitted to psychiatric services in Louisiana and Maryland in 1960, rates for children were considerably higher in Maryland than Louisiana as a result of the greater availability and use of psychiatric outpatient clinics in Maryland (26) (figure 14). Little difference was noted between the two States in rates for children admitted to public mental hospitals, but in Louisiana unlike Maryland there was a greater use of psychiatric facilities in general hospitals primarily because of the large psychiatric unit at Charity Hospital in New Orleans.

Maryland Psychiatric Case Register

The Maryland Psychiatric Case Register provides unique information on the utilization of psychiatric facilities through the linkage, into a single record, of all episodes of service received by an individual over a specified interval of time. Several other registers currently in existence in the United States are Monroe County, N.Y., Hawaii, and a three-county area in North Carolina (25). Results of a Monroe County register study will be discussed in the section following.

Multiple Use of Facilities (Amount of Duplication)

Information on the multiple use of facilities in Maryland is available by examining the amount of duplication within each type of service, that is, the number of admission actions compared to the number of patients served. Table 9 illustrates that about 1 percent of the 1,600 young children (under 10 years), and about 2 percent of the 3,100 adolescents 10-17 years, used more than one facility during the year ending June 30, 1964 (27). Most of the multiple usage occurred in clinic services.

Length of Stay

Comparisons of length of stay of discharged patients also reveal differences in how facilities are used. As shown in the table below, for example, the median number of months under care in county clinics, which are primarily rural, is generally short compared to that of city clinics. This reflects to some extent the inaccessibility of these rural clinics as well as the use made of such clinics for nontreatment services, such as psychological testing services, which are available in the larger cities through the school system.

Number of Patients and Median Months under Care, 1964

Type of facility	Patients under 5 years of age		Patients 5-14 years of age	
	Number	Months under care	Number	Months under care
Inpatient facilities:				
Public mental hospitals	3	*	64	5
Private mental hospitals	3	*	25	31
General hospitals	0	*	10	12
Outpatient clinics:				
Baltimore City clinics	20	5	374	10
County clinics	25	5	705	6
State hospital clinics	5	*	20	2
D.C. clinics	10	10	305	24

*Too few patients for reliable data.

Recurrent Episodes of Psychiatric Service to Adolescents in Maryland

The utilization of facilities by 5,000 adolescents, during a 3-year period, was examined in a recent study based on the Maryland Psychiatric Case Register (28). Seventy-seven percent of these adolescents were seen in outpatient facilities only, 13 percent were inpatients only, and 9 percent received both types of care (table 10). Fifteen percent of the adolescents had multiple admissions. These included a relatively high proportion of patients who were hospitalized, children with psychosis or brain syndromes, and referrals from social or welfare agencies.

An unexpected finding concerned the disposition of the patient's case following his first admission. Approximately the same proportion of cases was discharged with a disposition of "further care not indicated" whether this was the first of several admissions or the only admission in this period (30 percent). Such a finding would suggest the need for a study of the treatment and discharge policies of psychiatric facilities involved.

Monroe County, New York, Psychiatric Case Register

Data from the Monroe County Psychiatric Case Register are of particular interest because they are collected not only from psychiatric facilities but from private psychiatrists (25). Seven percent of the 570 children under 15 years of age admitted to psychiatric care were seen in private psychiatric practice. Over 90 percent were seen in outpatient clinics. One-tenth of the children seen in private practice were seen in other psychiatric facilities also.

RELATIONSHIP OF HOUSEHOLD FACTORS TO PATTERNS OF CARE FOR MENTAL ILLNESS

Louisiana—Maryland Socioeconomic Study

Research on the etiology and the ecology of mental illness has stressed the importance of family characteristics and living arrangements on the risk of needing psychiatric care.

The socioeconomic study previously mentioned attempted to identify segments of the population having a high risk of psychiatric admissions (29). Records on admissions to all psychiatric facilities in Louisiana and Maryland, during the year following the 1960 census, were matched against census schedules so that data on family characteristics, income, occupation, etc., were available. Several findings specific for children were consistent in both States:

(1) Rates for children in husband-wife families decreased with increasing family size (figures 15, 16).

(2) Rates for children in "other male" families were unusually high in families of size 2 (no mother) and in those of six or more members.

(3) Rates for children of female-head families were unusually high in families of size 2 (no father) in Louisiana. In Maryland, rates for children of female-head families were twice as high as rates for husband-wife families, regardless of size of family (families of size 2 excluded).

(4) Although most children were first admitted to outpatient services, a relatively larger proportion in lower income families tended to go to State mental hospitals (figure 17).

Baltimore Ecology Study

A study stemming from the Maryland register on the ecology of diagnosed mental illness in Baltimore indicated a positive association between high psychiatric admissions and such factors as adult crime, juvenile delinquency, unemployment, poor housing, low educational and occupational attainment, and children not living with both parents (30).

Table 9

Duplicated and Unduplicated Counts of Children Who Are Maryland Residents Admitted to Psychiatric Facilities, July 1, 1963 - June 30, 1964

Type of facility	Duplicated - Number of admission actions		Unduplicated (within each type of facility) - Number of patients served within each type of facility	
	Under 10 years	10-17 years	Under 10 years	10-17 years
All facilities	1,661	3,165	1,639	3,101
All inpatient facilities	128	641	128	621
Public mental hospitals	113	458	113	450
Private mental hospitals	10	80	10	76
General hospitals	5	103	5	95
Outpatient clinics	1,533	2,524	1,511	2,480
Baltimore City clinics	408	637	400	628
County clinics	864	1,611	852	1,582
State hospital clinics	197	203	195	198
D. C. clinics	64	73	64	72

Source: Maryland Psychiatric Case Register Statistical Series, Annual Tables for Year Ended June 30, 1964, Series A-II, B-II. U.S. Department of Health, Education, and Welfare, PHS, NIMH and Maryland State Department of Mental Hygiene.

Table 10

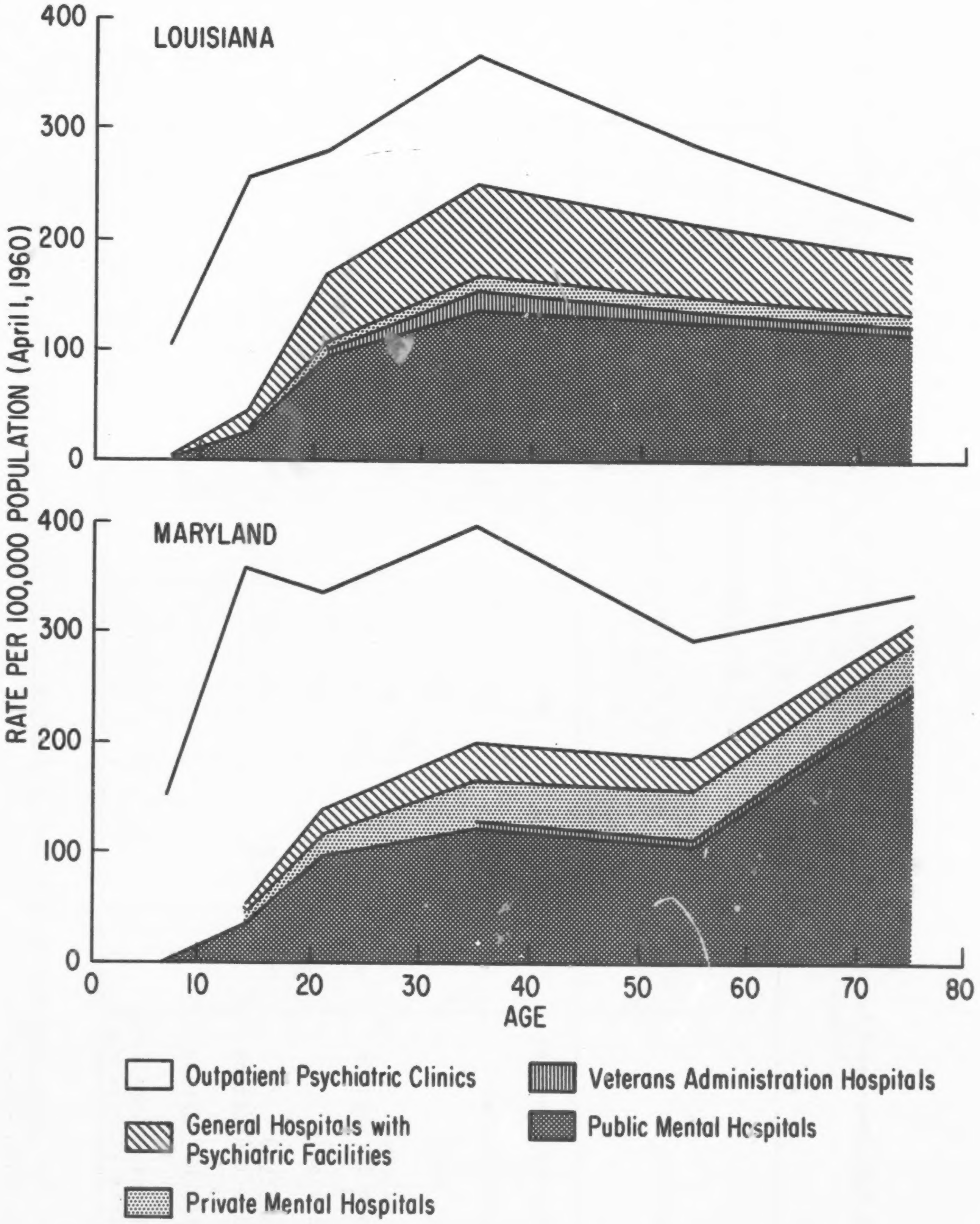
Use of Maryland Psychiatric Facilities by Adolescents, 10 to 17 Years of Age, July 1, 1961 - June 30, 1964, According to Number of Admissions and Length of Time Between Episodes.

Type of facility	All Groups	Number Of Admissions					
		One Admission				Multiple Admissions	
		Undercare June 30, 1964		Terminated prior to June 30, 1964		Longest Interval between a Termination and Next Readmission	
		Duration of Admission		Duration since Termination			
		365 days or less	366 days or more	365 days or less	366 days or more	92 days or less	93 days or more
Total number of patients	5,109	627	294	1,260	2,137	349	442
Percent distribution	100	100	100	100	100	100	100
Inpatient only	13	15	31	14	9	18	9
One facility	12	15	31	14	9	10	3
Multiple facilities	1	-	-	-	-	8	6
Outpatient only	77	85	69	86	91	11	39
One facility	77	85	69	86	91	9	36
Multiple facilities	.4	-	-	-	-	2	3
Both types of service	9	-	-	-	-	71	52
Outpatient - inpatient	7	-	-	-	-	50	42
Inpatient - outpatient	2	-	-	-	-	21	10

Source: Recurrent Episodes of Psychiatric Service in an Adolescent Population by A.K. Bahn and M.S. Oleinick, NIMH, July 1966.

FIGURE 14

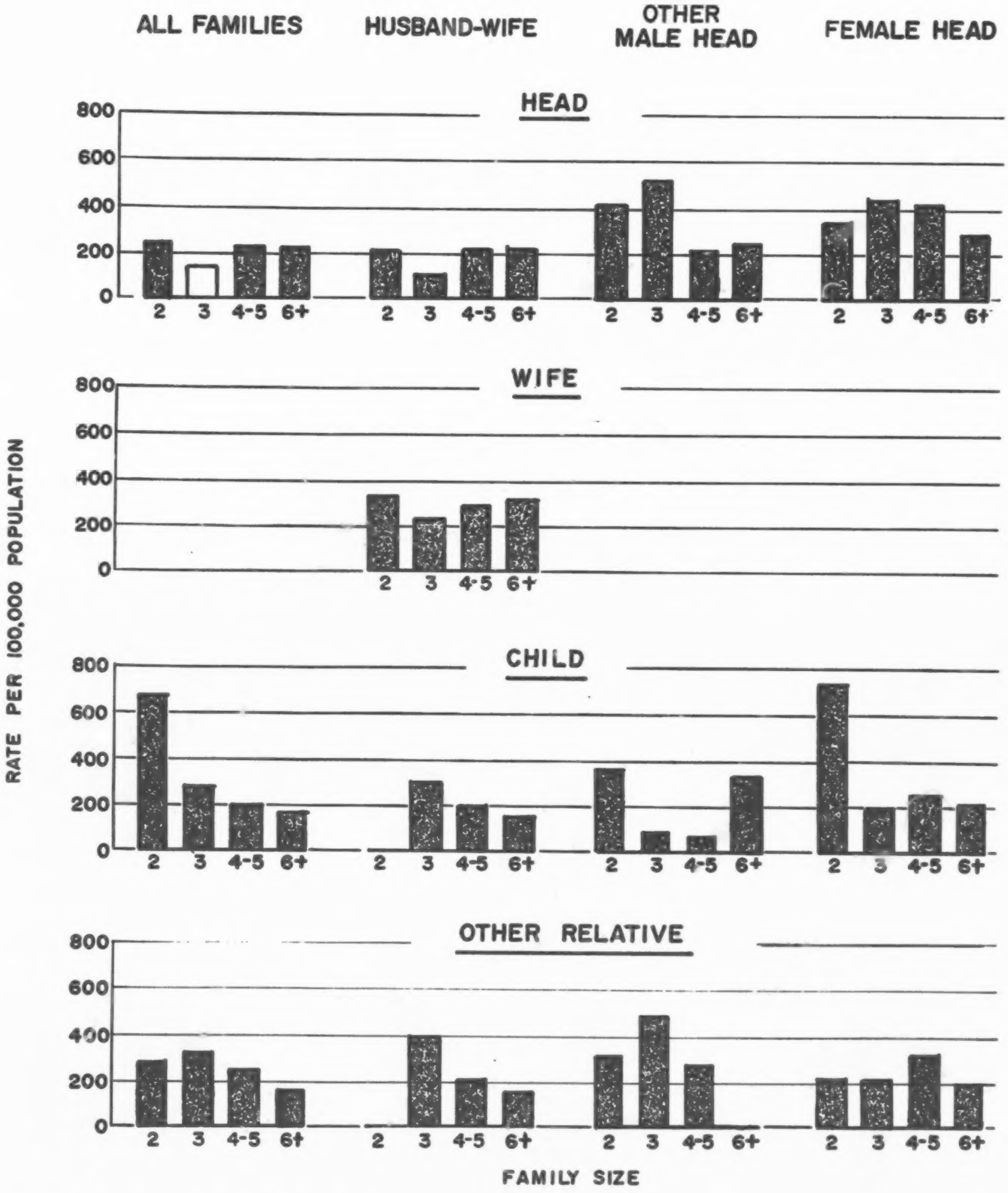
FIRST ADMISSION RATES TO PSYCHIATRIC FACILITIES BY TYPE OF FACILITY LOUISIANA AND MARYLAND, 1960-1961



Source: Socioeconomic and Family Characteristics of Patients Admitted to Psychiatric Services (Figure 2) by E. S. Pollack, R. W. Redick, V. B. Norman, C. R. Wurster and K. Gorwitz. Amer. J. of Public Health 54: 506-518, March 1964.

FIGURE 15

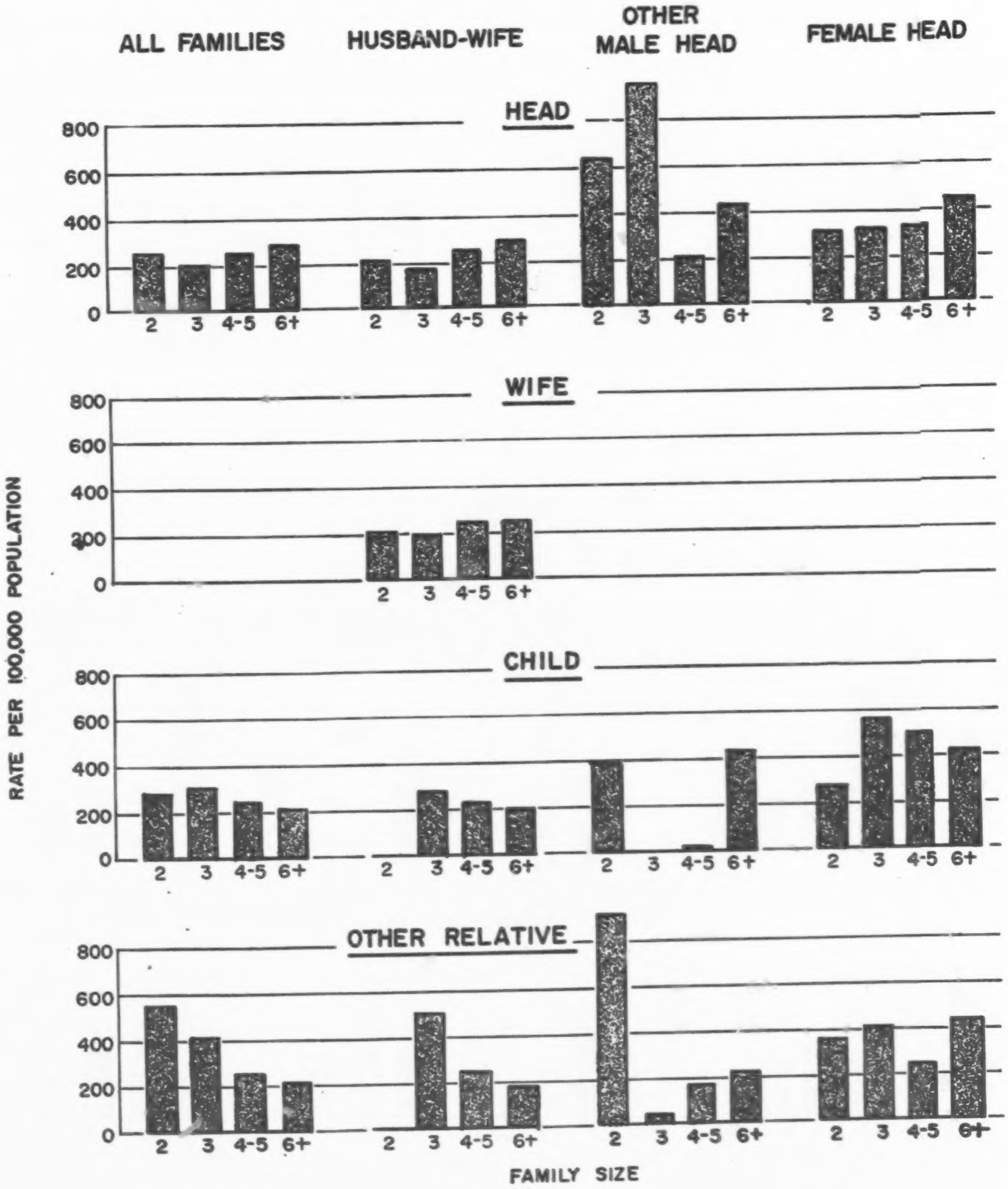
AGE-ADJUSTED FIRST ADMISSION RATES BY FAMILY RELATIONSHIP, FAMILY SIZE, AND TYPE OF FAMILY
LOUISIANA, 1960-61



Source: Monitoring a Comprehensive Mental Health Program: Methodology and Data Requirements (Figure 2) by E. S. Pollack. NIMH, June 1966.

FIGURE 16

AGE-ADJUSTED FIRST ADMISSION RATES BY FAMILY RELATIONSHIP, FAMILY SIZE, AND TYPE OF FAMILY
MARYLAND, 1960-61

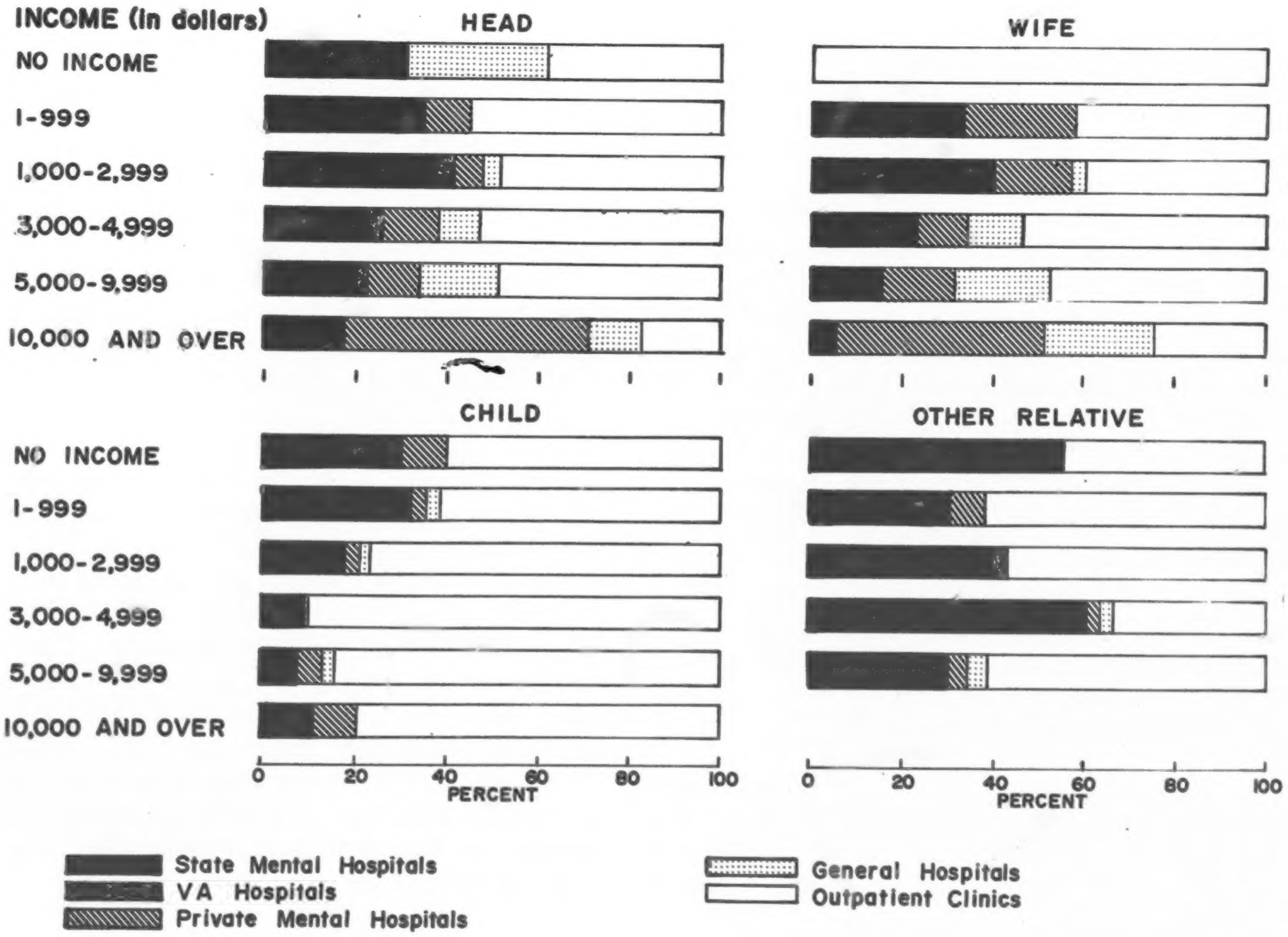


Source: Monitoring a Comprehensive Mental Health Program: Methodology and Data Requirements (Figure 3) by E. S. Pollack. NIMH, June 1966.

FIGURE 17

FIRST ADMISSIONS TO PSYCHIATRIC FACILITIES BY FAMILY RELATIONSHIP AND INCOME OF FAMILY HEAD

PERCENT DISTRIBUTION BY TYPE OF FACILITY, MARYLAND, 1960-61



Source: Monitoring a Comprehensive Mental Health Program: Methodology and Data Requirements (Figure 18) by E. S. Pollack. NIMH, June 1966.

USE OF NONPSYCHIATRIC RESOURCES

Information is lacking on the number and characteristics of children receiving mental health services in nonpsychiatric community agencies. Many of these agencies, such as family service agencies, special services of school systems, and psychological clinics, consider their services primarily "mental health." According to some recent estimates made by the Biometry Branch of NIMH, there may be almost as many of these para psychiatric agencies serving children as there are psychiatric clinics. However, no complete information is available. Other resources such as social welfare agencies and group medical practices not specifically oriented toward mental health care also provide such services.

STUDY OF PATIENTS IN MARYLAND PSYCHIATRIC CASE REGISTER AND SPECIAL SERVICES OF THE BALTIMORE SCHOOL SYSTEM

A recent study conducted in collaboration with the Division of Special Services of the Baltimore school system attempted to identify children 12-19 years of age served by that Division (DSS) who also received service in a psychiatric facility in Maryland (31). The DSS is an evaluation and counseling service designed for children with emotional or adjustment problems. Characteristics of the psychiatric cases were compared with a control group of nonpsychiatric DSS cases.

Of particular interest were the findings related to family background. Psychiatric cases had significantly more disruptive factors present in their childhood including maternal or paternal mental illness, and paternal criminal activities, than nonpsychiatric DSS cases (table 11). Also, considerably more broken homes and changes in living arrangments were found for the psychiatric cases compared to the nonpsychiatric ones (table 12). These findings are similar to those in a study of early socialization experiences of psychiatric clinic cases in Baltimore matched with controls from the total school population (32). It is significant that of 5,000 children receiving attention from the DSS during a 14-month period, only 6 percent were identified as having been on the rolls of a psychiatric facility in Maryland sometime during July 1, 1961, through June 30, 1964.

TABLE 11

Characteristics of Adolescents, 12 to 17 Years of Age, Receiving Services in a Maryland Psychiatric Facility and/or Social Work Services in the Baltimore School System (Division of Special Services)

Family Data: Selected Disruptive Familial Factors

Category	Division of Special Services Cases	
	Also Psychiatric Cases on Maryland Register	Non Psychiatric Cases - Control Group
Number of Cases	140	177
Percent Distribution:		
Number of disruptive factors:	100	100
None	25	27
One	20	29
Two	17	23
Three	19	8
Four or more	19	13
Selected disruptive factors:	#	#
Poverty	17	22
Physical illness - Mother	7	9
Father	3	4
Mental illness - Mother	11	3
Father	7	2
Alcoholism - Mother	4	2
Father	11	6
Crime - Mother	.7	.6
Father	9	3
Sibling	9	4
Neglect - Mother	9	6
Father	9	6
Conflict - General	8	5
Regarding child	4	5
Physical abuse	6	5
Rejection	12	10
Parent inadequate, etc.	8	1

# Does not add to 100 percent, since more than one disruptive factor may be present.

Source: Characteristics of Adolescent Cases Receiving Psychiatric Services and/or School Facility Services by M.S. Oleinick and A.K. Bahn, NIMH, July 1966.

TABLE 12

Characteristics of Adolescents, 12 to 17 Years of Age, Receiving Services in a Maryland Psychiatric Facility and/or Social Work Services in the Baltimore School System (Division of Special Services)

Family Data: Living Arrangements

Category	Division of Special Services Cases	
	Also Psychiatric Cases on Maryland Register	Non Psychiatric Cases - Control Group
Total Number of Cases	140	177
Percent Distribution:		
Parental marital status:	100	100
Married	47	52
Separated	16	10
Divorced	4	3
Widowed	9	10
Never married	3	3
Mother and stepfather	19	21
Other	2	1
Maternal employment:	100	100
Housewife	54	64
Part-time employed	15	6
Full-time employed	31	30
Living with father:	100	100
Natural	44	50
Stepfather	17	21
None	29	22
Other	10	7
Living with mother:	100	100
Natural	86	92
Other	14	8
Number of changes in living arrangements:	100	100
None or one	32	48
Two or more	68	52
If change in living arrangement, major portion of time with:	100	100
No change	22	34
Mother and father	36	26
Mother only	16	16
Mother and stepfather	12	17
Other	14	7

Source: Characteristics of Adolescent Cases Receiving Psychiatric Services and/or School Facility Services by M.S. Oleinick and A.K. Bahn, NIMH, July 1966.

IMPLICATIONS AND DISCUSSION

This report has presented data on patterns of care of children under 18 years of age in psychiatric facilities as derived from the annual reporting program and special studies conducted by the Biometry Branch of the National Institute of Mental Health. The special studies cited for a State or community provide supplementary information which might help to explain these utilization patterns. No attempt is made here to provide an exhaustive compendium of research in the areas covered but only to consolidate the findings of the Biometry Branch. These special studies should be interpreted with this limitation in mind.

This section will deal with the implications of these findings for planning and administration of mental health programs and for conducting research on the prevalence, etiology, and ecology of mental illness.

SEX DIFFERENCES

Of the almost half-million children under care during 1966, about 300,000, or about 65 percent, were boys. A sex ratio of approximately two boys to one girl was prevalent in clinics and public mental hospitals, the facilities providing service to 90 percent of the children. Further, boys remained in hospitals longer. These findings raise a number of questions on factors associated with these differential patterns of care which suggest areas for further research. Is there a true difference in incidence of emotional disorder by sex, or do the "acting out" behavior patterns of boys cause their parents and community agencies to seek help more frequently? Do as many girls suffer from emotional disorders but receive help from nonpsychiatric agencies? What other factors contribute to this pattern? Why are so many more boys than girls treated in public mental hospitals and outpatient psychiatric clinics than in private mental hospitals and general hospitals? Is the predominance of certain disorders for each sex in each facility (psychoneurosis among girls and personality disorders among boys) due to true incidence, a reflection of diagnostic bias, or other factors? Why does the sex ratio change after childhood and adolescence in outpatient clinics where rates are higher for young women 20-34 years than for young men? What implications do the sex differences in utilization patterns, both among children and adults, have toward the development of adequate case-finding and treatment services (table 13)?

DIFFERENCES IN UTILIZATION PATTERNS AMONG PSYCHIATRIC FACILITIES

Comparisons of the similarities and differences in utilization patterns by age, sex, and diagnosis among different types of psychiatric facilities can provide insight into their varying roles in the care of mentally ill children and adolescents.

Major findings are:

(1) In each type of facility, there were relatively more boys than girls with personality disorders (except younger boys in general hospitals) and more girls than boys with psychoneurotic disorders.

(2) Transient situational personality disorders were predominant in clinics for all children and in inpatient facilities for adolescents.

(3) Schizophrenic reactions, particularly among adolescents, and brain syndromes, were considerably more important in inpatient facilities than in outpatient clinics.

(4) There was a somewhat higher proportion of younger patients with personality

disorders in private mental hospitals in contrast to the lower percent with situational disorders in these facilities. In all other types of facilities the distribution is reversed. The difference may be more one of diagnostic practice than pathology.

Another finding of significance is the extremely high proportion of brain syndrome cases in the under 10-year age group in general hospitals. This reflects the ready accessibility of the hospital, particularly for emergencies, the ability of the general hospitals to serve such cases, and the probability that the general practitioner and pediatrician are treating these patients.

The high proportion of undiagnosed patients seen in clinics compared to the relatively few in hospitals is also of interest (tables 3a, 3b, 3c). This reflects various factors: the kind of children who come to clinics, the reluctance of the clinic psychiatrist to "label" a patient, the inadequacy of the diagnostic classification for many children's disorders, the brief service provided to many patients, the use of clinics as an evaluation and testing service, and, also, the admittance practices in hospitals. Unlike clinics where patients are not necessarily assigned a diagnosis until termination (and sometimes not even then), a diagnosis is usually required at admission to a hospital, particularly to a general hospital where insurance benefits demand this.

Further investigation is needed to determine to what extent the selection of the psychiatric facility reflects true need, or merely availability. For example, the admission and treatment policies of a facility may exclude certain patients who will in turn seek the "next best" care or none at all. Available data show that services for children are limited or not provided in many facilities. Of the more than 2,000 clinics open in 1965, approximately 80 percent served children while the remainder were open only to adults. According to a recent survey of the State mental hospitals, 39 provided separate units for children, and an additional 76 provided children's services but did not have any special programs for this age group. Of the approximately 150 private residential treatment centers for children in operation in 1965 (33), most could serve only a small caseload (an average of 55 children in each) and many were extremely costly (34, 35).

Coordination of various types of psychiatric services on a community level is of considerable importance today in providing for effective utilization of available resources. The movement toward the establishment of community mental health centers and other community-based services emphasizes this need. In addition, followup studies to determine what happens to children who receive psychiatric services are urgently needed to provide some basis for evaluation of psychiatric programs.

LIVING ARRANGEMENTS AND HOUSEHOLD COMPOSITION, CENSUS DATA

The National Institute of Mental Health studies on household composition suggest a correlation between chance of admission to a psychiatric facility and living arrangements. Because of the influence of a depersonalized or disruptive environment on the demands for mental health services, it is important to consider some data for two groups of children living under inadequate family situations, those living in institutions and those living in broken homes.

Institutional Population

According to the 1960 U.S. Census, 238,000 children under 18 years lived in institutions (36) (figure 18). Data on color emphasizes marked differences in the kinds of institutions occupied by white and nonwhite children. For example, 60 percent of the institutionalized white children lived either in facilities for the mentally handicapped or in homes for dependent children, while only 36 percent of the nonwhite children lived in these types of institutions. On the other hand, 18 percent of the white children who were institutionalized lived in training schools for juvenile delinquents or other correctional facilities in contrast to 40 percent of the nonwhite children. These findings suggest that there may be vast inequities in the way in which behavior problems of children from different social and racial backgrounds are handled.

Children Living in One Parent or No Parent Homes

In 1960, 92 percent of the white children under 14 years, but only 68 percent of the nonwhite children in this age group, lived with both parents (37) (table 14). Of the more than 6,000,000 children under 14 years living apart from at least one parent, more than 1,600,000 lived with neither parent, and about 4,500,000 lived with one parent. Of those not living with both parents, a slightly higher proportion of white children than nonwhite lived with their father only, while relatively more nonwhites than whites lived with neither parent.

The occurrence of broken homes appears to be increasing. Data available for 1960 and 1966 on family arrangements for children under 18 years indicate that, in 1960, 25 percent of the nonwhite children and 8 percent of the white children under 18 did not live with both parents; in 1966, the percents were 29 and 9, respectively (38).

Mental Illness, Color, Poverty

The correlation between the risk of a psychiatric admission and environmental factors associated with living in a poverty area, that is, high proportion of disruptive families, juvenile delinquency, adult crime, poor housing, and inadequate education, has been shown. Mental health administrators are faced with difficult problems in developing programs to prevent and control mental illness among persons living in "poverty" areas. These problems are particularly intense for the nonwhites. Data show that 62 percent of all nonwhite families lived in poverty areas in 1966 (38). In terms of income, 35 percent of the nonwhite families had incomes below the poverty level (less than $3,000 per year) compared to only 10 percent of the whites.

Although no hospital data for children, by color, are available nationwide, a 13-State Biometry Branch collaborative study (MRA Cohort Study) showing first admission rates to State mental hospitals, by age, color, and sex during 1960, indicated that for nonwhite children, schizophrenia admission rates were about three times as high as the corresponding rates for white children (39). Similarly, outpatient data indicate that rates for nonwhite children were higher than those of white children but only for the more serious disorders. Clinic data also indicate that nonwhite children are more likely to receive clinic care when they are older. These findings point up the critical need for effective methods for prevention, early case-findings, and meaningful treatment programs directed toward poverty and culturally deprived groups.

SUICIDE

In considering the impact of various social factors on the development of effective mental health programs, consideration must be given to the increasing suicide rate in the group 15-24 years of age during the last decade (figures 19a, 19b). Suicide prevention programs designed for adolescents and college age persons must be developed to counteract this rising trend.

IMPACT OF FEDERAL AND STATE PROGRAMS ON PATTERNS OF CARE AND LENGTH OF STAY IN INPATIENT FACILITIES

Only limited data from various States are available on the length of time under care and type of service a child receives in a hospital setting. Data on number of patients and median months of care, previously presented in this report, provide a comparative picture for Maryland for 1 year. The probability of being released within a specified time span is dependent on many factors, such as admission policies of the hospital, patient characteristics, and suitable outpatient programs for "aftercare" as well as the kinds of programs provided in the hospital for children. For example, a new Federal educational program provides for funds to establish such programs for handicapped children (40). Similarly, the NIMH's Hospital Improvement Grant Program, focusing on improved services in State mental hospitals, also provides for educational services for children (41). Such programs established in a mental hospital may have the effect of prolonging hospital care.

Data on length of stay from the MRA Cohort Study of patients admitted to State mental hospitals from July 1, 1959, through June 30, 1960, indicate differences, by color and sex, in length of time under care among children hospitalized for schizophrenia (39) (appendix table 14). Forty percent of the children under 15 years were still in the hospital 1 year after admission, compared to 18 percent of those 15-24 years of age. In general, a larger proportion of boys than girls, in both age groups, and relatively more whites than nonwhites, particularly among the younger children, remained in the hospital after 1 year.

On the other hand, a recent report for 14 Southern States providing data for all hospitalized children, by color and length of stay in mental hospitals, indicated that the nonwhites remained somewhat longer than the whites (42). Data from this report and from California showed that for a number of these States the median length of hospitalization was greater for younger children than for older ones (43). According to Dr. Harold L. McPheeters of the Southern Regional Education Board, the variability reflected by data from individual States reflects not only differences in the availability of programs specifically for children but, to some extent, the differences in philosophy concerning provisions of services for children (4[illegible]). Some believe that children should not be hospitalized, while others feel that hospital treatment should be long term. Some experts believe that children should be hospitalized in separate hospitals, while others consider it preferable to mix young people in with adults because this provides a more normal family-like structure.

In spite of these philosophical differences, nationwide trend data indicate that the number of youths receiving care in State mental hospitals is continuing to increase in spite of current emphasis on reducing the mental hospital patient population (44, 45). Not only are admission rates increasing but resident patient rates as well. These trends will continue unless steps are taken to develop more effective prevention and early treatment programs.

CURRENT AND PROJECTED MENTAL HEALTH PROGRAM NEEDS

Estimated Needs: School Studies

Discussion in this report has focused primarily on current utilization patterns of psychiatric facilities, not on incidence or prevalence of mental illness among children.

Various surveys conducted through school systems provide us with some estimates of how many children may really need mental health care. Several of these surveys indicated that approximately 2 to 3 percent of the school children were in need of psychiatric care and an additional 7 percent in need of some help for emotional problems (46, 47, 48). Other estimates have ranged from 7 to 12 percent (49).

How easily and accurately can these children be identified? A study by Bower, et al., on school characteristics of male adolescents who later became schizophrenic suggests that these boys were significantly different from a randomly selected control group of peers (50). Preschizophrenic boys tended to have less interest in girls, group activities and athletics, showed less leadership skills, and were more submissive, anxious, dependent and careless than the average boy.

Such findings have far reaching implications. The school is in an extremely strategic position to provide systematic case-finding services. If, in fact, it can identify children who later become seriously disturbed, organized case-finding programs can be developed to detect incipient mental illness. Such programs, however, must be coupled with effective treatment services.

Current Needs

If we assume the conservative figure of 2 percent, as cited above, 1,400,000 children needed psychiatric care in 1966 (51). Our estimate indicates that less than 500,000, or only a third, received such care.

Projected Needs

If current patterns and trends in the utilization of psychiatric clinics and mental hospitals continue, it is estimated that, by 1975, approximately 1,200,000 children will receive care in a psychiatric facility, 900,000 in clinics, the remainder in hospitals.

In terms of estimated needs, however, the picture is quite different. By using a conservative population projection (51), in 1975, there will be 77,845,000 children under 18 years of age (appendix table 15). Minimally (2 percent in need), 1,500,000 children will require help in 1975. Assuming a 7 percent estimate of needs, almost 5,500,000 children will need help. For a 12 percent estimate, more than 9,000,000 will need help.

Manpower Projections

An estimate of expected manpower resources can provide a realistic appraisal of potential ability to provide needed services. Projections are available on manpower in the mental health care professions for 1968-1972 based on training programs, estimates made by various professional groups, attrition, etc. (52). If we assume that current manpower and utilization patterns continue (see appendix 16 for assumptions and method), by 1972, almost 15 percent fewer mental health core professionals will be available than the expected demand for service. In short, we will not be able to provide the current level of service in the near future. This expected dearth of services may be even greater for children than adults. Considering only clinics, where most children are served, children receive less service in terms of time than adults because only a third receive treatment compared to more than half of the adults (9).

Underlying these manpower projections is an assumption that current levels of service, that is, the ratio of available manpower to patient population, should be maintained. To evaluate this assumption we can consider the goals stated in 1961 by the Joint Commission on Mental Illness and Health for clinic programs—two full-time professional clinic teams or 280 man-hours per week per 100,000 population (53). In 1965, only 221 man-hours per 100,000 patients were provided. For hospital patients, in 1965, there was a ratio of one mental health professional to 30 patients. However, the ratios of one physician for 30 patients in admission or intensive care, and one registered nurse, one psychologist, and one social worker for each 40 patients are considered minimal, according to another report of the Joint Commission on Mental Illness and Health (54). Using this as a guide, instead of one mental health professional for each 30 patients, we should have three to four. These data clearly indicate that our present level of service is considerably below recommended goals.

TABLE 13

Ratio of Male to Female Rates Per 100,000 Population for Patients Under Care, Total Admissions, & Resident Patients By Type of Psychiatric Facility, By Age, United States 1966

PATIENTS UNDER CARE

Age	Total All Facilities	Public and Private Mental Hospitals			General Hospital	Outpatient Clinics	State, County & VA
		Total	State & County	Private			
Total	1.19	1.35	1.13	0.64	0.71	1.30	1.47
Under 15	2.05	2.13	2.20	1.56	1.05	2.11	2.22
15-24	1.18	1.66	1.77	1.00	0.73	1.19	1.86
25-34	0.98	1.62	1.49	0.55	0.61	0.83	1.92
35-44	1.18	1.71	1.17	0.57	0.68	1.06	1.97
45-54	1.19	1.39	1.12	0.62	0.76	1.28	1.51
55-64	1.14	1.25	1.16	0.69	0.86	1.14	1.32
65+	1.12	1.18	0.95	0.60	0.88	1.14	1.23

TOTAL ADMISSIONS

Age	Total All Facilities	Public and Private Mental Hospitals			General Hospital	Outpatient Clinics	State, County & VA
		Total	State & County	Private			
Total	1.10	1.39	1.29	0.63	0.71	1.26	1.67
Under 15	2.01	1.88	1.99	1.35	1.05	2.12	2.01
15-24	1.13	1.57	1.69	0.98	0.73	1.19	1.79
25-34	0.89	1.42	1.43	0.53	0.61	0.79	1.79
35-44	1.05	1.64	1.24	0.57	0.68	0.96	2.10
45-54	1.07	1.44	1.24	0.62	0.76	1.12	1.75
55-64	1.03	1.23	1.31	0.68	0.86	1.09	1.46
65+	1.05	1.20	1.17	0.63	0.88	1.09	1.35

RESIDENT PATIENTS

Age	Total All Facilities	Public and Private Mental Hospitals			General Hospital	Outpatient Clinics	State, County & VA
		Total	State & County	Private			
Total	1.32	1.33	1.03	0.69	0.72	1.34	1.35
Under 15	2.12	2.48	2.54	2.29	1.11	2.11	2.54
15-24	1.29	1.87	1.93	1.08	0.73	1.19	1.99
25-34	1.15	2.02	1.59	0.67	0.61	0.88	2.11
35-44	1.42	1.80	1.11	0.55	0.67	1.18	1.85
45-54	1.37	1.35	1.06	0.64	0.76	1.47	1.37
55-64	1.25	1.27	1.12	0.72	0.86	1.20	1.28
65+	1.17	1.17	0.88	0.52	0.88	1.19	1.19

Source: Based on data to be published in Patients in Mental Institutions 1966 Parts II and III and Outpatient Psychiatric Clinics - Data on Patients 1966 and data published in Annual Report - Administrator of Veterans Affairs 1967.

Table 14

Total Number and Percent Distribution of Persons under 14 Years of Age According to Family Status and Presence of Parents, by Age and Color, United States, 1960

Family status and presence of parents	White				Nonwhite			
	Total Under 14 years	Under 6 years	6-9 years	10-13 years	Total Under 14 years	Under 6 years	6-9 years	10-13 years
Total number (in thousands)	45,094	20,747	12,669	12,278	7,351	3,532	2,035	1,784
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A) Living with both parents	91.9	93.3	91.8	89.5	67.7	69.1	67.4	65.4
1) In primary families 1/	91.9	93.3	91.8	89.5	67.6	69.0	67.4	65.4
a) Father is head	90.8	91.5	91.0	89.0	65.4	65.6	65.9	64.5
b) Grandparent is head	1.0	1.6	0.7	0.4	1.8	2.7	1.2	0.7
c) Uncle or aunt is head	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1
d) Other relative is head	0.0	0.1	0.0	0.0	0.2	0.4	0.1	0.1
2) In secondary families 1/	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
B) Living with father only	0.8	0.6	0.9	1.2	1.8	1.4	1.9	2.4
1) In primary families 1/	0.8	0.6	0.9	1.2	1.8	1.4	1.8	2.4
a) Father is head	0.7	0.5	0.7	1.0	1.3	0.9	1.4	2.0
b) Grandparent is head	0.1	0.1	0.2	0.2	0.4	0.4	0.4	0.3
c) Uncle or aunt is head	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
d) Other relative is head	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2) In secondary families 1/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C) Living with mother only	5.5	4.7	5.6	6.9	19.6	18.5	20.3	20.8
1) In primary families 1/	5.5	4.6	5.5	6.8	19.4	18.3	20.1	20.6
a) Mother is head	4.4	3.1	4.7	6.1	15.4	13.2	16.7	17.9
b) Grandparent is head	1.0	1.3	0.7	0.6	3.1	4.0	2.7	2.0
c) Uncle or aunt is head	0.1	0.1	0.1	0.1	0.5	0.6	0.4	0.4
d) Other relative is head	0.0	0.1	0.0	0.0	0.4	0.5	0.3	0.3
2) In secondary families 1/	0.0	0.1	0.1	0.0	0.2	0.2	0.2	0.2
D) Living with neither parent	1.8	1.4	1.7	2.4	10.9	11.0	10.4	11.4
1) In primary families 1/	1.2	1.0	1.1	1.5	9.3	9.5	8.8	9.4
a) Grandparent is head	0.7	0.6	0.7	0.8	6.2	6.7	6.0	5.7
b) Uncle or aunt is head	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
c) Other relative is head	0.5	0.4	0.4	0.6	2.9	2.7	2.7	3.5
2) In secondary families 1/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3) Secondary individual in household 2/	0.3	0.2	0.2	0.3	0.8	0.8	0.8	0.9
4) In group quarters	0.3	0.2	0.4	0.6	0.8	0.7	0.8	1.1
a) Inmate of institution	0.2	0.1	0.3	0.5	0.3	0.1	0.3	0.6
b) Secondary individual 3/	0.1	0.1	0.1	0.1	0.5	0.6	0.5	0.5

1/ A "primary family" comprises the head of a household and all (one or more) other persons in the household related to the head. All other families are "secondary families"; these comprise groups of mutually related persons such as lodgers or resident employees.

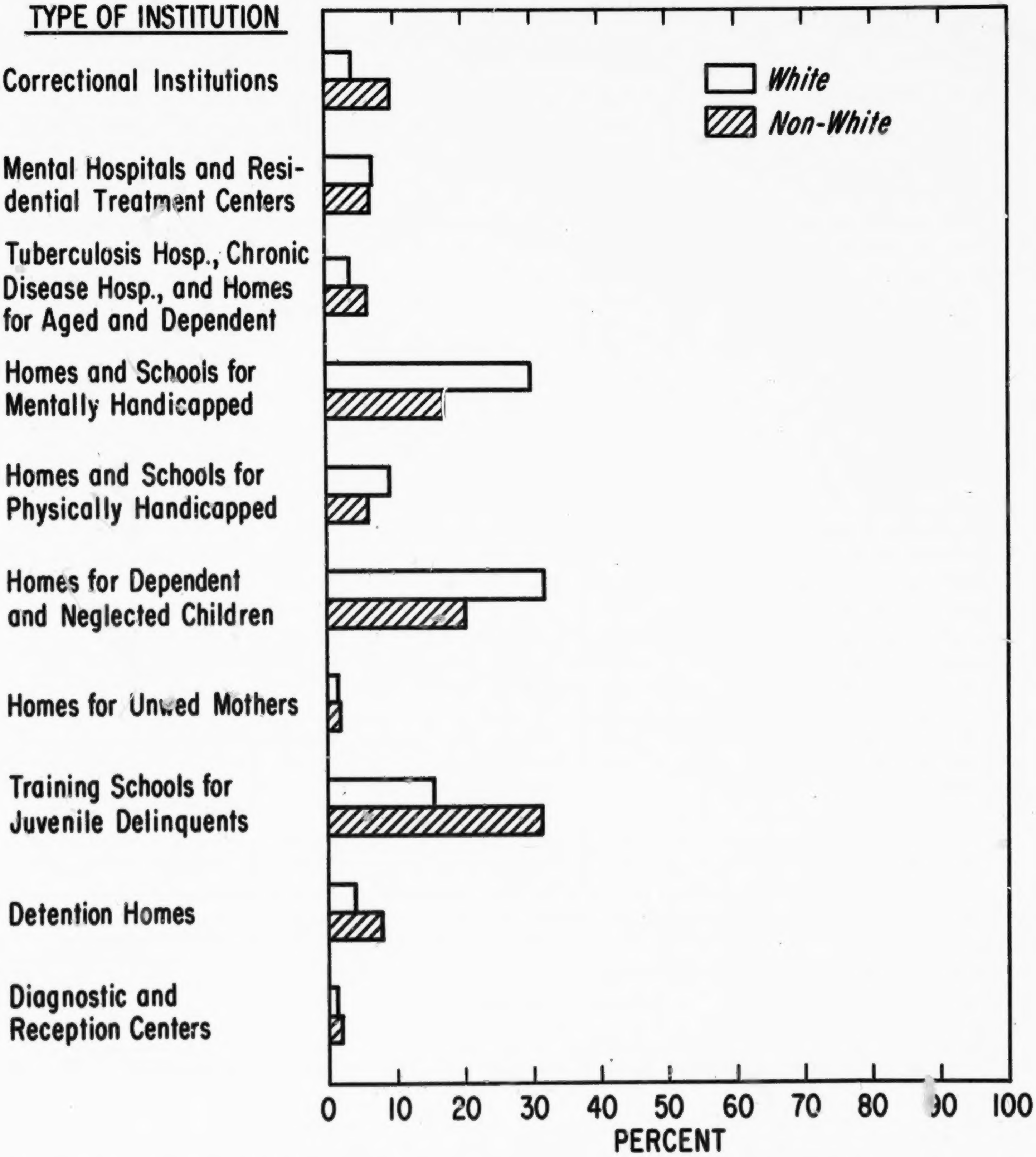
2/ These are essentially children living with foster families.

3/ Children resident in group quarters who are not inmates of institutions.

Source: Persons by Family Characteristics, U. S. Census of Population, Series PC(2) 4B (Table 1). U.S. Department of Commerce, Bureau of the Census.

FIGURE 18

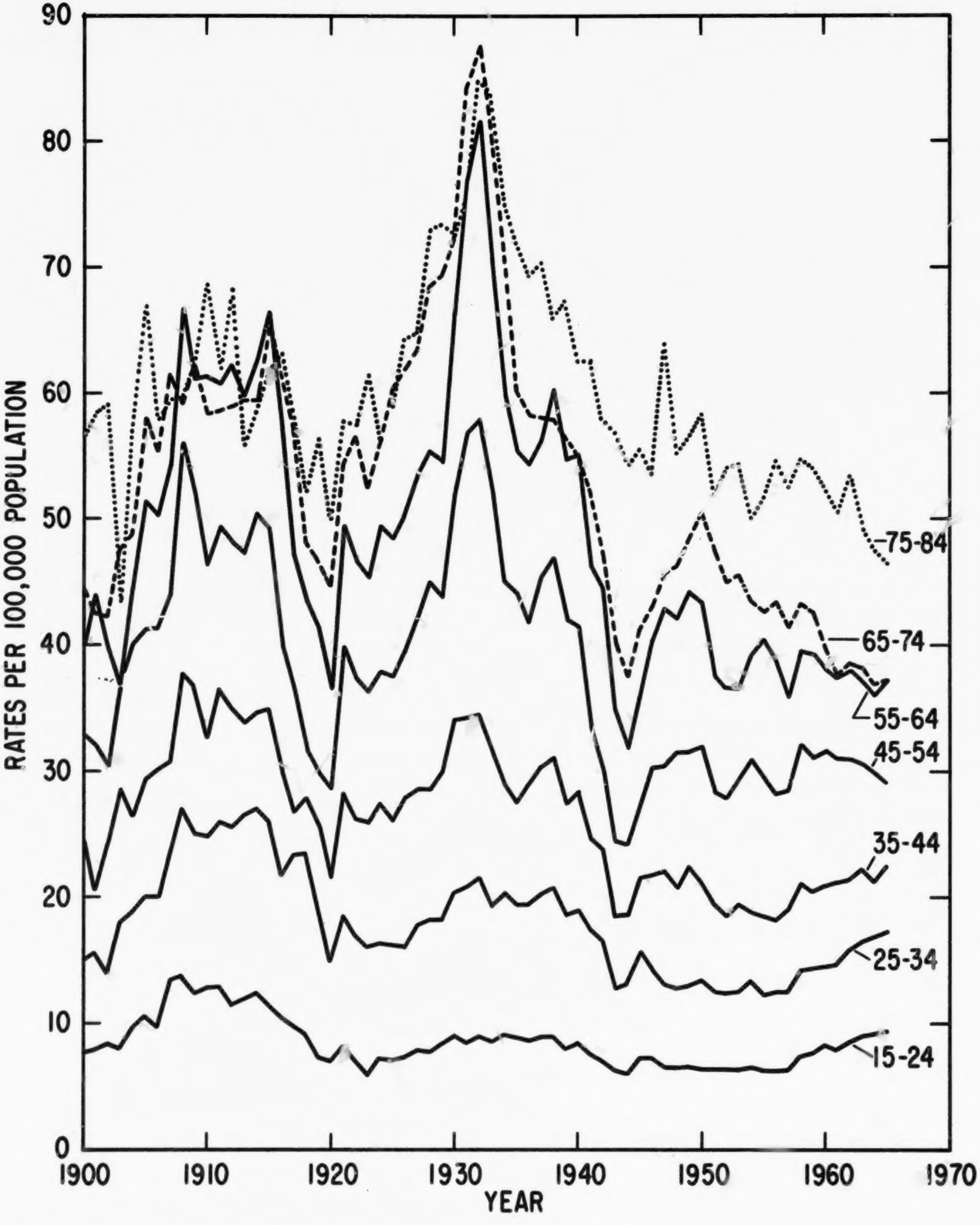
PERCENT DISTRIBUTION OF PERSONS UNDER 18 YEARS OF AGE WHO ARE INMATES OF INSTITUTIONS, BY TYPE OF INSTITUTION AND COLOR, UNITED STATES, 1960



Source: Inmates of Institutions, U.S. Census of Population, Series PC(2)8A (Tables 4-11). U.S. Department of Commerce, Bureau of the Census.

FIGURE 19a

DEATH RATES FOR SUICIDE, BY AGE, FOR MALES, UNITED STATES, 1900-1965 1/

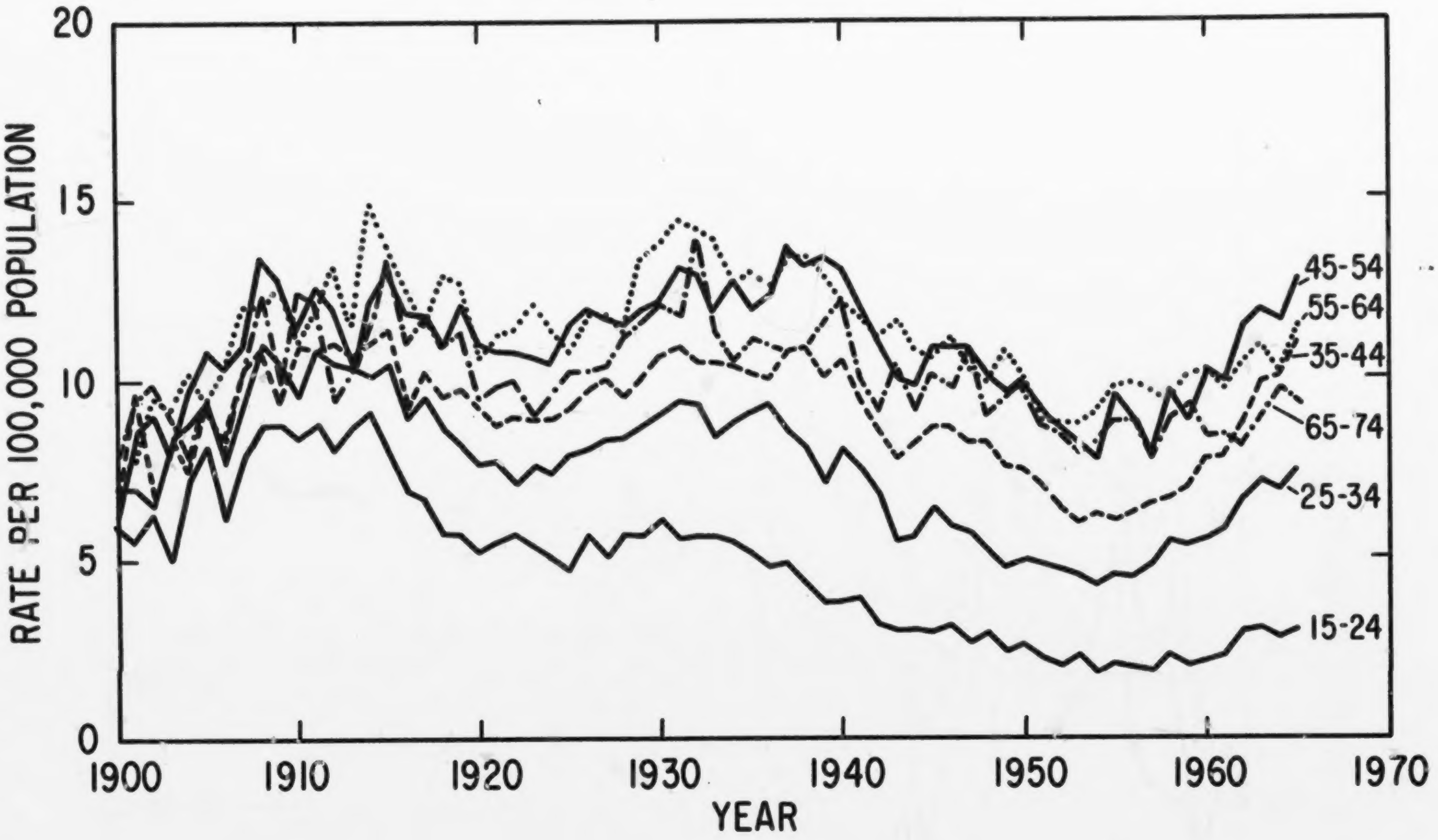


1/ Death rates for age group 85 years and over are not shown.

Source: National Center for Health Statistics, U.S. Department of Health, Education, and Welfare, Public Health Service.

FIGURE 19b

DEATH RATES FOR SUICIDE, BY AGE, FOR FEMALES, UNITED STATES, 1900-1965 [1]



[1] Death rates for age groups 75-84 and 85 and over are not shown.

Source: National Center for Health Statistics, U.S. Department of Health, Education, and Welfare, Public Health Service.

CONCLUDING REMARKS

This report presents an overview of psychiatric services to children in the United States and highlights major findings and their implications for program planning. This study serves to emphasize the need for more complete data, particularly on the utilization of psychiatric facilities by minority groups, epidemiological data on incidence and prevalence of mental disorders among children, and information describing specific problems bringing children to psychiatric facilities. More precise information is needed on the ways children are using psychiatric services, the specific kinds of services provided and treatment methods used, and an evaluation of the effectiveness of such services.

In terms of program development, systematic case-finding techniques must be integrated into community resources so that children with both serious or incipient mental health problems can be identified. Concomitantly, meaningful and effective treatment techniques meeting the needs of large numbers of patients from a wide variety of socioeconomic and cultural backgrounds must be developed. The expected dearth in available psychiatric resources to serve the needs of children further emphasizes the requirements of careful definition and assessment of needs to establish realistic priorities and goals. It would seem inevitable that large numbers of nonprofessional personnel must be trained to assume selected responsibilities in treatment and rehabilitation programs for the mentally ill child and his family as well as in community mental health programs directed toward protecting the emotional health of our child population.

In short, current mental health services at all levels—prevention, treatment, and rehabilitation—must be evaluated, and new and imaginative services must be devised to serve all those in need.

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APPENDIX TABLES

Appendix Table 1

Disposition by Age, Total and Treated Adolescent Patients Terminated from 788 Outpatient Psychiatric Clinics, United States, 1962

Disposition	Total	Age at admission				
		10-11 years	12-13 years	14-15 years	16-17 years	18-19 years
Total number of patients	53,674	12,258	12,083	13,592	9,183	6,558
Percentage distribution:						
Patient or family withdrew	31.2	29.7	28.7	29.3	31.9	41.3
Clinic terminated without referral:						
Further care not indicated	22.1	26.8	23.1	19.6	19.0	20.8
Other	8.2	8.5	8.1	8.5	8.3	6.8
Clinic terminated with referral to:	31.4	28.3	32.6	35.0	32.9	25.7
Inpatient psychiatric facility	5.7	3.7	5.1	5.8	7.3	8.2
Outpatient psychiatric facility, incl. private psychiatrist, day care center	3.4	3.2	3.3	3.0	3.6	4.8
Private physician	1.6	1.9	2.0	1.2	1.3	1.7
Other health agency or medical facility	1.5	2.2	1.5	1.1	1.2	1.4
Social service agency	6.4	5.8	7.2	7.6	6.8	2.6
Court, correctional institution	5.6	2.0	4.7	9.0	7.9	3.7
School	5.6	8.2	7.4	5.9	2.6	1.1
Other (incl. psychological services, clergy, etc.)	1.6	1.3	1.4	1.4	2.2	2.2
Not stated	7.1	6.8	7.3	7.5	7.9	5.0
Number of treated patients	17,795	3,984	3,840	4,017	3,139	2,815
Percentage distribution:						
Patient or family withdrew	39.4	34.0	34.0	39.2	44.0	49.3
Clinic terminated without referral:						
Further care not indicated	32.2	41.1	34.9	30.6	26.6	24.0
Other	8.7	7.8	9.9	9.4	9.0	7.2
Clinic terminated with referral to:	15.8	13.6	17.8	17.0	16.1	15.0
Inpatient psychiatric facility	4.5	2.4	3.9	4.4	5.7	7.1
Outpatient psychiatric facility, incl. private psychiatrist, day care center	2.6	1.7	2.6	2.2	2.8	4.2
Private physician	1.0	1.3	1.4	.7	.8	.8
Other health agency or medical facility	.7	.9	.7	.5	.6	.8
Social service agency	1.9	2.3	2.8	2.0	1.7	.5
Court, correctional institution	1.8	.9	2.0	3.2	2.4	.4
School	2.4	3.3	3.5	3.0	1.0	.2
Other (incl. psychological services, clergy, etc.)	.9	.8	.9	1.0	1.1	1.0
Not stated	3.8	3.2	3.5	3.8	4.1	4.5

Appendix Table 2

Disposition by Major Diagnostic Category, Total and Treated Adolescent Patients Terminated from 788 Outpatient Psychiatric Clinics, United States, 1962

Disposition	Total	Major diagnostic category								
		Brain syndromes	Mental deficiency	Psychotic disorders	Psycho-physiologic disorders	Psycho-neurotic disorders	Personality disorders	Transient situational personality disorders	Without mental disorder	Undi-agnosed
Total number of patients	53,674	1,766	4,238	2,926	451	5,722	11,560	15,142	1,532	10,637
Percentage distribution:										
Patient or family withdrew	31.2	17.6	8.1	33.3	40.1	37.3	29.7	32.7	8.8	43.3
Clinic terminated without referral:										
Further care not indicated	22.1	16.8	18.8	8.7	21.7	23.5	19.0	29.0	36.9	17.8
Other	8.2	6.7	6.0	6.2	10.0	9.8	9.9	8.7	4.5	6.5
Clinic terminated with referral to:	31.4	53.4	57.5	47.1	22.2	21.6	34.4	23.5	41.7	24.6
Inpatient psychiatric facility	5.7	14.8	11.6	32.2	2.4	4.5	4.5	1.8	.8	2.8
Outpatient psychiatric facility, incl. private psychiatrist, day care center	3.4	4.1	1.6	4.9	3.1	4.9	3.3	2.9	.8	4.3
Private physician	1.6	8.2	1.9	1.5	6.2	1.5	1.1	1.1	1.8	1.5
Other health agency or medical facility	1.5	8.0	3.8	1.0	2.7	.8	1.0	.8	2.9	1.1
Social service agency	6.4	4.4	12.4	2.6	3.8	3.7	6.3	6.0	22.5	4.9
Court, correctional institution	5.6	2.7	6.1	2.2	1.1	2.5	11.7	5.2	3.7	2.7
School	5.6	8.8	18.3	1.4	2.0	2.4	4.5	4.6	8.2	5.2
Other (incl. psychol. services, clergy, etc.)	1.6	2.4	1.8	1.3	.9	1.3	2.0	1.1	1.0	2.1
Not stated	7.1	5.4	9.6	4.9	6.0	7.7	7.0	6.1	8.2	7.7
Number of treated patients	17,795	658	505	1,219	246	3,120	4,649	7,044	124	230
Percentage distribution:										
Patient or family withdrew	39.4	29.9	24.6	37.4	43.5	41.3	42.2	39.0	25.0	41.3
Clinic terminated without referral:										
Further care not indicated	32.2	22.5	27.3	15.0	32.5	33.0	27.3	38.8	47.6	33.5
Other	8.7	6.5	6.3	7.2	8.1	8.6	11.0	8.0	9.7	5.7
Clinic terminated with referral to:	15.8	38.0	38.6	36.4	12.8	12.1	15.9	10.5	15.2	16.3
Inpatient psychiatric facility	4.5	13.4	12.1	25.6	1.6	2.6	3.3	1.2	1.6	4.3
Outpatient psychiatric facility, incl. private psychiatrist, day care center	2.6	4.3	2.0	5.6	2.0	2.9	2.4	2.0	2.4	1.3
Private physician	1.0	8.5	1.2	.8	2.4	1.1	.6	.6	-	.4
Other health agency or medical facility	.7	4.3	3.0	.4	1.5	.6	.5	.4	4.8	.4
Social service agency	1.9	2.4	2.2	1.4	1.6	1.9	2.2	1.8	1.6	2.6
Court, correctional institution	1.8	1.2	2.0	.6	1.2	.8	3.4	1.5	1.6	3.0
School	2.4	3.0	14.5	.8	1.6	1.5	2.2	2.3	2.4	2.6
Other (incl. psychol. services, clergy, etc.)	.9	.9	1.6	1.2	.8	.7	1.3	.7	.8	1.7
Not stated	3.8	3.0	3.4	3.9	2.8	4.9	3.8	3.5	2.4	3.0

Source: Adolescent Patients Served in Outpatient Psychiatric Clinics (Tables 4a,b) by B. M. Rosen, R. Shellow and E. M. Bower. American Journal of Public Health 55: 1563-1577, October 1965.

Appendix Table 3

Disposition by Referral Source, Total and Treated Adolescent Patients Terminated from 780 Outpatient Psychiatric Clinics, United States, 1962

Disposition	Total	Referral source					
		Self, family, friend	School	Court	Social service agency	Private physician	Other
Total number of patients	52,970	10,337	13,116	6,337	6,892	8,933	6,851
Percentage distribution:							
Patient or family withdrew	31.4	38.9	31.6	20.5	19.7	37.4	32.1
Clinic terminated without referral:							
Further care not indicated	22.1	28.3	22.7	14.3	19.1	23.1	21.2
Other	8.2	9.0	7.9	8.0	6.7	7.7	10.1
Clinic terminated with referral to:	31.5	18.8	20.0	50.7	45.8	24.9	32.9
Inpatient psychiatric facility	5.7	4.5	3.7	7.6	6.3	5.7	8.8
Outpatient psychiatric facility, incl. private psychiatrist, day care center	3.4	4.0	2.8	2.0	1.7	4.3	5.7
Private physician	1.6	1.1	1.0	.3	.5	5.4	1.1
Other health agency or medical facility	1.5	.6	.7	.4	2.5	2.3	3.3
Social service agency	6.4	2.4	2.6	4.1	29.8	2.4	3.7
Court, correctional institution	5.6	1.2	2.4	33.9	1.8	.9	2.6
School	5.7	3.4	14.5	1.4	1.6	2.6	4.5
Other (incl. psychological services, clergy, etc.	1.6	1.6	1.3	1.0	1.6	1.3	3.2
Not stated	6.7	5.0	8.9	6.6	8.5	6.8	3.6
Number of treated patients	17,205	3,986	3,870	1,367	1,616	3,530	2,501
Percentage distribution:							
Patient or family withdrew	40.2	40.3	38.5	39.0	36.9	42.1	39.7
Clinic terminated without referral:							
Further care not indicated	32.8	36.7	36.3	27.6	28.3	33.7	27.5
Other	8.8	8.3	9.2	9.5	9.4	7.7	10.2
Clinic terminated with referral to:	14.7	11.2	13.3	21.9	18.5	12.2	19.9
Inpatient psychiatric facility	4.2	3.3	2.7	4.4	4.0	3.7	8.1
Outpatient psychiatric facility, incl. private psychiatrist, day care center	2.5	2.3	1.5	1.7	2.4	2.5	4.7
Private physician	1.0	1.0	.8	.2	.6	1.9	.8
Other health agency or medical facility	.5	.3	.5	.2	.7	.5	1.1
Social service agency	1.8	1.2	1.3	2.1	6.6	1.2	1.5
Court, correctional institution	1.7	.9	.9	10.9	1.9	.7	.7
School	2.1	1.4	4.9	1.5	1.1	1.0	1.5
Other (incl. psychological services, clergy, etc.).	.9	.8	.7	.9	1.2	.7	1.5
Not stated	3.6	3.6	2.6	2.0	6.9	4.4	2.8

Source: Adolescent Patients Served in Outpatient Psychiatric Clinics (Table 4c) by B. M. Rosen, R. Shellow and E. M. Bower. American Journal of Public Health 55: 1563-1577, October 1965.

Appendix Table 4

Percent Distribution of Disposition by Referral Source, of Total and Treated Patients under 18 Years of Age, Terminated from 801 Outpatient Psychiatric Clinics, United States, 1963

REFERRAL SOURCE 1/		DISPOSITION										
		Not Referred			Referred for Further Service to:							
	Total No. of Patients	Patient Withdrew	Further Care Not Indicated	Other	Ment. Hosp. (Pub. & Priv.) Trt. Center for Children Other Inpatient Facility	Training School for the Mentally Retarded	Priv. Psy., Other Outpatient, Psy. Day Care Centers	Priv. Phys., Gen. Hospital, Other Medical	Social Service Agency, Priv. Psychologist	Court	School	All Other
All Children	73,894	27.7	22.9	10.3	4.6	2.2	4.0	5.1	7.7	4.8	7.7	3.0
Self, family, friend	14,650	34.4	30.6	11.0	3.2	1.6	4.7	2.6	4.2	1.1	4.2	2.4
Mental Hospital (Pub. & Priv.) Res. Trt. Ctr. for Children Other Inpatient Facility	1,940	31.3	18.4	8.6	12.3	2.4	5.2	2.8	5.0	7.3	3.9	2.8
Training School for the Mentally Retarded	182	6.6	8.2	2.2	3.3	69.2	1.7	2.2	1.1	.6	3.3	1.6
Private Psychiatrist, Other Outpatient, Day Care Center	2,168	31.3	24.6	10.0	9.8	2.1	9.9	2.9	3.9	1.1	2.2	2.2
Private Physician, General Hosp. Other Medical	19,395	26.5	25.4	11.0	4.2	2.7	4.4	13.5	4.0	.7	4.7	2.9
Social Service Agency, Private Psychologist	8,126	17.8	17.8	7.9	5.9	3.8	2.2	1.9	36.8	1.5	1.9	2.5
Court	6,737	17.5	12.7	6.4	7.1	1.3	2.5	.8	5.8	41.0	1.0	3.9
School	17,414	29.8	22.5	11.6	2.4	1.0	3.4	1.9	3.4	1.1	21.2	1.7
All Other	3,282	24.8	21.8	10.5	7.3	2.6	3.6	3.7	5.6	1.3	5.1	13.7
Treated Children 2/	23,415	32.9	38.2	10.7	3.5	.5	2.3	2.0	2.9	1.9	3.2	1.9
Self, family, friend	5,493	34.2	43.0	10.0	2.3	.6	2.3	.9	1.8	.6	2.6	1.7
Mental Hospital (Pub. & Priv.) Res. Trt. Ctr. for Children Other Inpatient Facility	786	32.3	26.0	5.6	14.2	.5	4.8	1.7	2.9	8.9	1.7	1.4
Private Psychiatrist, Other Outpatient, Day Care Center	939	33.1	36.1	10.6	5.5	.4	5.2	2.2	2.6	1.3	1.4	1.6
Private Physician, General Hosp. Other Medical	6,354	33.2	39.3	10.9	2.9	.7	2.5	4.2	2.0	.4	2.1	1.8
Social Service Agency, Private Psychologist	1,805	29.5	35.3	8.6	5.3	.7	2.2	1.4	12.4	1.3	1.4	1.9
Court	1,450	34.0	29.3	10.4	4.1	.4	1.5	.7	2.9	13.9	.9	1.9
School	5,496	32.6	38.0	12.6	2.7	.2	1.6	1.5	1.8	.9	6.7	1.6
All Other	1,080	29.7	36.2	10.8	3.5	.6	2.2	2.2	3.0	1.2	4.3	6.3

1/ Referral source groups of 25 patients or less omitted.

2/ Includes 12 treated patients referred by Training Schools for the Mentally Retarded.

Source: A Nationwide Survey of Outpatient and Other Psychiatric Services to Two Diagnostic Groups, Mentally Deficient Children and Psychotic Adults, 1963 (Table 3a) by B. M. Rosen, A. K. Bahn, B. S. Brown and P. H. Person. NIMH, 1966.

Appendix Table 5

Resident Patient Rates per 100,000 Population[1/], by Age and Sex, in State and County Mental Hospitals, United States, 1950-1965

Year	BOTH SEXES							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	341.2	3.0	84.6	234.2	453.7	624.7	763.9	1,057.3
1951	344.4	3.6	100.9	257.8	461.4	626.0	730.6	1,016.4
1952	346.9	3.7	97.4	251.1	452.2	634.6	738.6	1,058.4
1953	349.3	4.8	94.9	253.3	450.6	642.4	740.2	1,080.2
1954	348.2	4.6	94.9	252.2	443.9	639.9	731.5	1,105.9
1955	344.4	4.7	86.1	246.0	427.2	622.8	753.7	1,125.1
1956	333.5	5.2	82.3	230.1	402.9	602.0	752.2	1,109.6
1957	325.8	6.3	85.8	225.1	380.3	581.1	741.4	1,105.8
1958	318.0	6.7	85.3	218.2	361.6	566.4	731.1	1,099.2
1959	310.4	7.6	92.0	227.1	353.4	549.7	717.8	1,045.4
1960	300.6	7.9	91.9	216.4	333.5	538.1	711.3	964.8
1961	291.2	8.3	94.7	216.3	322.2	512.4	700.7	926.1
1962	280.6	8.4	92.8	211.8	309.3	490.0	683.3	885.8
1963	270.5	9.0	93.6	206.2	299.6	465.1	664.8	847.3
1964	259.0	8.6	94.5	201.3	289.4	439.4	636.1	805.3
1965	247.6	10.2	95.5	197.2	276.2	406.8	603.5	772.9

[1/] Rates are computed on the basis of July 1 civilian population, U.S. Bureau of Census, Current Population Reports, Series P-25.

Source: Patients in Mental Institutions, Part II, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 6

Male Resident Patient Rates per 100,000 Population[1], by Age and Sex, in State and County Mental Hospitals, United States, 1950-1965

Year	MALE							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	338.1	3.5	102.8	249.5	476.8	620.0	701.9	1,033.0
1951	344.6	4.4	131.5	275.1	482.8	630.3	663.9	992.2
1952	346.3	4.4	127.1	269.7	470.3	644.3	668.9	1,031.3
1953	348.4	5.9	127.6	272.9	465.3	656.2	671.1	1,051.3
1954	345.3	5.6	124.2	271.4	453.6	659.0	665.9	1,069.1
1955	340.6	6.1	113.4	272.6	434.6	639.9	703.0	1,074.3
1956	330.0	6.9	110.0	257.6	411.3	622.4	707.7	1,055.9
1957	324.4	8.5	115.1	258.3	391.7	605.6	710.1	1,049.6
1958	317.2	9.1	113.9	254.8	374.2	592.8	712.6	1,038.5
1959	310.6	10.4	120.7	264.4	367.8	577.6	711.3	983.9
1960	302.1	11.0	123.5	254.6	344.4	562.0	718.1	903.1
1961	293.6	11.8	127.7	258.3	335.0	535.4	714.6	861.6
1962	284.1	11.8	125.0	260.1	323.1	512.3	705.0	819.4
1963	274.0	12.7	126.0	252.9	314.0	483.8	692.4	780.8
1964	262.8	12.0	126.7	250.2	306.5	455.4	666.1	738.9
1965	251.0	14.6	126.6	244.0	290.3	417.2	636.2	713.9

[1] Rates are computed on the basis of July 1 civilian population, U.S. Bureau of Census, Current Population Reports, Series P-25.

Source: Patients in Mental Institutions, Part II, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 7

Female Resident Patient Rates per 100,000 Population[1], by Age and Sex, in State and County Mental Hospitals, United States, 1950-1965

Year	FEMALE							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	344.2	2.5	67.6	220.0	431.4	629.4	825.8	1,079.0
1951	344.2	2.7	76.0	242.2	441.0	621.7	796.7	1,038.1
1952	347.4	2.9	74.1	234.4	435.0	625.1	807.1	1,082.3
1953	350.1	3.7	69.2	235.5	436.7	629.0	807.2	1,105.8
1954	351.0	3.5	71.1	234.7	434.7	621.1	794.5	1,136.0
1955	347.9	3.3	63.1	221.7	420.2	606.3	802.0	1,169.0
1956	336.8	3.4	58.3	204.9	395.1	582.2	794.3	1,155.5
1957	327.2	4.0	60.4	194.5	369.6	557.6	770.9	1,153.2
1958	318.8	4.2	59.6	184.5	349.9	541.0	748.2	1,149.8
1959	310.3	4.7	65.9	192.7	340.0	523.2	723.8	1,096.3
1960	299.2	4.7	63.4	181.3	323.3	515.1	705.0	1,015.8
1961	289.0	4.7	64.7	177.7	310.3	490.3	687.6	978.7
1962	277.4	4.8	63.7	167.9	296.6	468.7	663.0	939.5
1963	267.3	5.1	64.0	163.4	286.1	447.3	639.1	900.1
1964	255.5	5.1	64.9	156.6	273.5	424.2	608.3	857.4
1965	244.5	5.7	66.8	154.2	263.2	397.0	573.4	818.7

[1] Rates are computed on the basis of July 1 civilian population, U.S. Bureau of Census Current Population Reports, Series P-25.

Source: Patients in Mental Institutions, Part II, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 8

First Admission Rates per 100,000 Population[1/], by Age and Sex, in State and County Mental Hospitals, United States, 1950-1965

Year	BOTH SEXES							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	75.9	2.8	58.8	83.8	99.2	97.4	101.9	234.0
1951	74.8	2.8	60.3	84.4	94.5	92.1	99.0	236.3
1952	77.1	3.0	61.7	90.1	98.2	95.7	99.7	241.4
1953	79.4	3.5	63.3	94.8	99.8	101.3	102.7	245.7
1954	76.3	3.5	62.2	95.8	103.6	101.1	93.5	217.7
1955	75.3	3.6	62.1	92.2	96.4	94.2	95.1	235.6
1956	75.9	4.2	63.8	91.0	96.0	96.9	99.6	236.1
1957	76.1	5.2	66.9	94.2	96.8	96.9	97.0	229.9
1958	80.1	5.6	72.1	100.6	101.7	103.2	103.2	237.7
1959	78.9	6.2	74.8	104.5	103.9	101.2	98.1	221.0
1960	78.6	6.5	79.3	108.2	104.5	101.6	96.9	198.2
1961	80.8	6.8	85.2	116.8	110.6	103.0	97.3	194.4
1962 2/	70.6	6.0	76.9	105.1	96.0	91.2	82.4	163.7
1963	70.8	5.9	79.5	107.0	99.3	90.4	82.3	155.9
1964	73.4	6.2	86.4	113.3	104.6	93.5	85.2	150.3
1965	75.1	7.5	88.6	118.5	106.6	96.6	86.1	146.5

1/ Rates are computed on the basis of July 1 civilian population, U. S. Bureau of Census, Current Population Reports, Series P-25.

2/ In 1962 the category Admissions With No Prior Psychiatric Inpatient Experience replaced the classification First Admissions. The major difference is that under the old classification prior psychiatric treatment in a general hospital was not considered previous psychiatric admission, whereas under the present classification such cases are included as having prior admission to an inpatient psychiatric facility.

Source: Patients in Mental Institutions, Part II, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 9

Male First Admission Rates per 100,000 Population1/, by Age and Sex, in State and County Mental Hospitals, United States, 1950-1965

Year	MALE							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	85.1	3.4	71.7	90.2	112.2	111.2	117.6	265.5
1951	84.2	3.2	76.8	90.8	106.5	106.2	113.6	270.1
1952	86.9	3.7	79.5	99.0	111.5	110.2	116.0	270.4
1953	90.7	4.4	81.8	108.9	116.3	117.2	121.2	273.6
1954	87.7	4.3	79.9	107.7	121.5	120.0	109.7	249.6
1955	86.1	4.5	79.9	105.2	112.2	111.9	110.8	265.8
1956	86.7	5.3	83.2	103.7	112.0	114.9	115.6	264.9
1957	87.6	6.9	86.8	109.4	114.8	116.1	112.6	258.1
1958	93.0	7.4	94.9	116.8	121.9	126.4	120.5	268.8
1959	90.5	8.3	94.5	118.7	122.9	121.5	113.9	250.1
1960	90.8	8.9	101.2	121.7	122.7	123.4	115.0	225.7
1961	93.4	9.0	106.4	131.8	128.9	125.3	116.4	225.2
1962 2/	81.4	7.9	94.4	119.1	111.6	111.0	99.5	188.8
1963	82.9	7.9	98.0	122.2	116.9	111.8	103.2	183.6
1964	86.3	8.1	108.8	132.1	123.8	114.2	105.9	174.9
1965	88.5	9.7	109.3	138.7	127.3	119.3	107.7	171.7

1/ Rates are computed on the basis of July 1 civilian population, U. S. Bureau of Census, Current Population Reports, Series P-25.

2/ In 1962 the category Admissions With No Prior Psychiatric Inpatient Experience replaced the classification First Admissions. The major difference is that under the old classification prior psychiatric treatment in a general hospital was not considered previous psychiatric admission, whereas under the present classification such cases are included as having prior admission to an inpatient psychiatric facility.

Source: Patients in Mental Institutions, Part II, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 10

Female First Admission Rates per 100,000 Population1/, by Age and Sex, in State and County Mental Hospitals, United States, 1950-1965

Year	FEMALE							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	67.0	2.3	46.8	78.0	86.6	83.8	86.2	205.7
1951	65.9	2.4	46.9	78.7	83.0	78.3	84.6	206.3
1952	67.8	2.3	47.7	82.1	85.5	81.4	83.7	215.7
1953	68.7	2.5	48.8	82.0	84.2	85.8	84.7	221.3
1954	65.5	2.6	47.8	85.1	86.7	82.6	78.0	189.7
1955	65.1	2.6	47.6	80.3	81.5	77.1	80.1	209.4
1956	65.7	3.0	47.0	79.5	81.8	79.6	84.4	211.4
1957	65.2	3.5	49.7	80.3	80.1	78.5	82.4	206.0
1958	67.7	3.8	51.8	85.7	82.9	81.0	86.9	211.6
1959	67.9	4.0	56.8	91.4	86.2	81.8	83.5	197.0
1960	66.9	4.1	59.4	95.7	87.5	80.6	80.0	175.5
1961	68.9	4.6	65.9	102.9	93.6	81.6	79.4	169.2
1962 2/	60.4	3.9	61.2	92.3	81.5	72.2	66.5	143.5
1963	59.3	3.8	62.6	93.0	83.0	70.0	62.9	133.9
1964	61.2	4.1	65.9	96.1	86.8	73.8	65.9	130.9
1965	62.4	5.2	69.4	100.0	87.4	75.2	66.2	127.0

1/ Rates are computed on the basis of July 1 civilian population, U. S. Bureau of Census, Current Population Reports, Series P-25.

2/ In 1962 the category Admissions With No Prior Psychiatric Inpatient Experience replaced the classification First Admissions. The major difference is that under the old classification prior psychiatric treatment in a general hospital was not considered previous psychiatric admission, whereas under the present classification such cases are included as having prior admission to an inpatient psychiatric facility.

Source: Patients in Mental Institutions, Part II, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 11

First Admission Rates per 100,000 Population[1], by Age and Sex, in Private Mental Hospitals, United States, 1950-1965

Year	Both Sexes							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	27.5	0.4	16.4	34.2	45.4	48.1	37.4	52.7
1951	26.9	0.4	17.4	33.9	44.5	45.0	37.4	50.5
1952	26.2	0.6	19.5	34.4	42.3	43.6	35.0	47.0
1953	26.5	0.5	18.9	36.0	44.1	43.9	36.0	47.0
1954	24.4	0.6	16.7	39.0	40.3	40.7	33.9	42.4
1955	28.6	0.6	18.8	37.5	46.0	50.1	44.8	51.3
1956	26.4	0.7	17.5	34.6	41.5	46.8	44.1	47.2
1957	23.5	0.6	17.7	32.8	37.4	40.0	37.2	40.5
1958	26.1	0.7	20.5	37.6	41.2	43.0	41.7	45.4
1959	24.3	0.7	19.3	35.3	39.8	39.7	38.3	41.6
1960	24.6	1.0	20.3	38.3	40.5	42.0	37.0	36.6
1961	21.3	1.0	19.0	33.0	36.3	36.6	30.3	29.5
1962	22.6	1.1	21.4	36.1	38.9	36.7	31.2	31.3
1963	22.8	0.9	22.7	39.2	39.5	36.7	29.4	30.2
1964	21.7	1.2	22.4	37.2	37.7	34.2	28.9	26.7
1965	21.0	1.3	22.4	36.0	37.1	33.0	26.3	25.2

[1] Rates are computed on the basis of July 1 civilian population, U. S. Bureau of Census, Current Population Reports, Series P-25.

Source: Patients in Mental Institutions, Part III, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 12

Male First Admission Rates per 100,000 Population[1], by Age and Sex, in Private Mental Hospitals, United States, 1950-1965

Year	Male							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	22.9	0.4	13.1	25.6	40.0	42.3	31.8	45.7
1951	22.7	0.4	15.4	25.3	38.4	40.1	32.8	45.1
1952	22.1	0.6	16.5	24.3	36.2	39.5	31.3	44.2
1953	22.0	0.5	15.5	26.0	37.8	38.9	30.9	42.2
1954	19.7	0.6	13.6	23.8	34.2	35.5	28.3	36.0
1955	22.7	0.6	15.5	25.2	36.9	43.6	36.7	44.6
1956	21.2	0.6	14.5	23.4	33.8	41.7	37.4	39.2
1957	18.8	0.7	15.3	22.3	29.3	36.5	31.8	33.3
1958	20.4	0.7	17.0	26.1	32.1	36.7	34.4	37.2
1959	19.1	0.6	16.1	24.5	30.5	34.5	32.9	34.1
1960	19.7	1.0	18.0	25.7	32.3	35.3	32.4	31.3
1961	16.7	1.2	16.5	21.3	26.9	30.8	27.8	25.1
1962	17.4	1.2	17.6	23.7	28.5	30.2	27.6	26.3
1963	17.3	1.0	18.5	25.3	28.6	29.9	25.4	25.4
1964	17.2	1.4	19.4	25.1	28.7	28.2	26.0	23.0
1965	17.0	1.4	19.6	24.6	27.5	29.1	24.5	22.7

[1] Rates are computed on the basis of July 1 civilian population, U. S. Bureau of Census, Current Population Reports, Series P-25.

Source: Patients in Mental Institutions, Part III, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 13

Female First Admission Rates per 100,000 Population[1], by Age and Sex, in Private Mental Hospitals, United States, 1950-1965

Year	Female							
	Total	Under 15	15-24	25-34	35-44	45-54	55-64	65+
1950	31.9	0.4	19.5	42.2	50.6	53.9	43.0	59.0
1951	30.8	0.4	19.1	41.6	50.4	49.9	41.9	55.3
1952	30.0	0.6	21.9	43.5	48.0	47.7	38.6	49.5
1953	30.8	0.5	21.5	45.1	50.1	48.7	41.0	51.2
1954	28.8	0.7	19.2	43.3	46.1	45.7	39.2	48.0
1955	34.1	0.7	21.5	48.7	54.6	56.4	52.5	57.0
1956	31.4	0.7	20.1	44.8	48.7	51.7	50.4	54.1
1957	28.0	0.6	19.8	42.5	45.0	43.4	42.3	46.6
1958	31.5	0.8	23.7	48.2	49.6	48.9	48.6	52.2
1959	29.2	0.7	22.3	45.2	48.4	44.6	43.4	47.8
1960	29.4	1.0	22.5	49.9	48.0	48.4	41.2	41.0
1961	25.6	0.8	21.2	43.8	45.0	42.1	32.6	33.0
1962	27.5	1.0	24.7	47.4	48.6	43.0	34.6	35.4
1963	28.1	0.8	26.6	51.8	49.6	43.1	33.1	34.1
1964	26.0	1.0	25.2	48.2	46.0	40.0	31.5	29.6
1965	24.8	1.2	25.0	46.6	46.0	36.6	28.0	27.1

[1] Rates are computed on the basis of July 1 civilian population, U. S. Bureau of Census, Current Population Reports, Series P-25.

Source: Patients in Mental Institutions, Part III, 1950-1965. U. S. Department of Health, Education, and Welfare, PHS, NIMH.

Appendix Table 14

PERCENT OF SCHIZOPHRENICS UNDER 15 AND 15-24 YEARS RETAINED IN STATE AND COUNTY MENTAL HOSPITALS BY COLOR AND SEX, MRA COHORT STUDY, 1960

Color and Sex	Under 15 Years of Age					15-24 Years of Age				
	Total Number	Percent Retained				Total Number	Percent Retained			
		Under 3 Months	6 Months	9 Months	12 Months		Under 3 Months	6 Months	9 Months	12 Months
All Races	523	82.4	60.2	48.4	40.7	3,175	67.8	35.8	23.5	17.8
Male	361	84.2	63.7	50.1	42.4	1,818	71.5	38.2	25.5	19.4
Female	162	78.4	52.5	44.4	37.0	1,357	62.8	32.7	20.9	15.7
White	356	78.9	59.8	49.4	43.3	2,417	66.7	35.6	23.5	18.0
Male	242	81.0	63.6	52.1	46.7	1,372	70.4	37.2	25.1	19.2
Female	114	74.6	51.8	43.9	36.0	1,045	61.8	33.4	21.5	16.4
Nonwhite	167	89.8	61.1	46.1	35.3	758	71.1	36.5	23.5	17.3
Male	119	90.8	63.9	46.2	33.6	446	74.7	41.0	26.9	20.0
Female	48	87.5	54.2	45.8	39.6	312	66.0	30.1	18.6	13.5

Source: For Model Reporting Area Cohort Study
Arkansas, California, Illinois, Kentucky, Louisiana, Michigan,
Minnesota, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Wisconsin

Appendix Table 15

ESTIMATES AND PROJECTIONS OF THE TOTAL POPULATION OF THE UNITED STATES, BY AGE AND SEX: 1960 TO 1990

(In thousands. Figures relate to July 1 and include Armed Forces abroad. For an explanation of the assumptions underlying the four series of projections, see text. Figures inside heavy lines represent, in whole or part, survivors of births projected for years after 1966)

Series, age, and sex	1960[1]	1966[2]	1970	1975	1980	1985	1990
BOTH SEXES							
Series A							
All ages	180,684	196,842	208,615	227,929	250,489	274,748	300,131
Under 5 years	20,364	19,851	21,317	27,210	31,040	33,288	35,015
5 to 9 years	18,825	20,806	20,591	21,468	27,341	31,160	33,403
10 to 14 years	16,910	19,402	20,668	20,741	21,616	27,478	31,290
15 to 19 years	13,467	17,895	19,100	20,807	20,879	21,753	27,596
20 to 24 years	11,116	14,047	17,261	19,299	20,997	21,068	21,939
14 years and over	127,335	140,466	150,075	162,836	174,234	187,963	206,427
18 years and over	116,123	126,167	134,267	145,940	158,229	168,956	183,346
21 years and over	108,836	116,100	123,413	133,657	145,388	157,096	167,916
Series B							
All ages	180,684	196,842	207,326	223,785	243,291	264,607	286,501
Under 5 years	20,364	19,851	20,027	24,350	27,972	30,325	31,493
5 to 9 years	18,825	20,806	20,591	20,184	24,492	28,103	30,451
10 to 14 years	16,910	19,402	20,668	20,741	20,334	24,635	28,239
15 to 19 years	13,467	17,895	19,100	20,807	20,879	20,475	24,762
20 to 24 years	11,116	14,047	17,261	19,299	20,997	21,068	20,668
14 years and over	127,335	140,466	150,075	162,836	174,234	186,166	201,710
18 years and over	116,123	126,167	134,267	145,940	158,229	168,759	181,010
21 years and over	108,836	116,100	123,413	133,657	145,388	157,096	167,084
Series C							
All ages	180,684	196,842	206,039	219,366	235,212	252,871	270,770
Under 5 years	20,364	19,851	18,740	21,211	24,298	26,645	27,462
5 to 9 years	18,825	20,806	20,591	18,903	21,366	24,443	26,784
10 to 14 years	16,910	19,402	20,668	20,741	19,056	21,514	24,586
15 to 19 years	13,467	17,895	19,100	20,807	20,879	19,200	21,651
20 to 24 years	11,116	14,047	17,261	19,299	20,997	21,068	19,400
14 years and over	127,335	140,466	150,075	162,836	174,234	184,351	196,619
18 years and over	116,123	126,167	134,267	145,940	158,229	168,576	178,616
21 years and over	108,836	116,100	123,413	133,657	145,388	157,096	166,267
Series D							
All ages	180,684	196,842	204,923	215,367	227,665	241,731	255,967
Under 5 years	20,364	19,851	17,625	18,323	20,736	23,030	23,765
5 to 9 years	18,825	20,806	20,591	17,793	18,489	20,894	23,182
10 to 14 years	16,910	19,402	20,668	20,741	17,948	18,643	21,044
15 to 19 years	13,467	17,895	19,100	20,807	20,879	18,095	18,788
20 to 24 years	11,116	14,047	17,261	19,299	20,997	21,068	18,300
14 years and over	127,335	140,466	150,075	162,836	174,234	182,768	191,977
18 years and over	116,123	126,167	134,267	145,940	158,229	168,424	176,509
21 years and over	108,836	116,100	123,413	133,657	145,388	157,096	165,566
All Series—25 Years Old and Over							
25 to 29 years	10,933	11,611	[illegible]	17,449	19,475	21,163	21,234
30 to 34 years	11,978	[illegible]	[illegible]	13,974	17,522	19,536	21,215
35 to 39 years	12,542	[illegible]	[illegible]	[illegible]	13,980	17,501	19,502
40 to 44 years	11,681	12,436	[illegible]	[illegible]	11,396	13,883	17,362
45 to 49 years	10,926	[illegible]	[illegible]	11,692	10,812	11,212	13,653
50 to 54 years	9,655	[illegible]	[illegible]	11,840	11,335	10,493	10,889
55 to 59 years	8,465	[illegible]	[illegible]	10,552	11,262	10,794	10,006
60 to 64 years	7,162	7,931	[illegible]	9,279	9,770	10,442	10,022
65 to 69 years	6,264	6,378	[illegible]	7,470	8,223	8,681	9,299
70 to 74 years	4,769	5,190	[illegible]	5,721	6,234	6,889	7,302
75 years and over	5,625	6,889	[illegible]	7,968	8,606	9,407	10,404

See footnotes at end of table.

Appendix Table 15 (continued)

ESTIMATES AND PROJECTIONS OF THE TOTAL POPULATION OF THE UNITED STATES, BY AGE AND SEX: 1960 TO 1990--Continued

(In thousands. Figures relate to July 1 and include Armed Forces abroad. For an explanation of the assumptions underlying the four series of projections, see text. Figures inside heavy lines represent, in whole or part, survivors of births projected for years after 1966)

Series, age, and sex	1960[1]	1966[2]	1970	1975	1980	1985	1990
MALE							
Series A							
All ages	89,332	96,900	102,541	111,994	123,185	135,305	148,056
Under 5 years	10,352	10,135	10,887	13,898	15,857	17,008	17,893
5 to 9 years	9,572	10,580	10,507	10,958	13,958	15,910	17,059
10 to 14 years	8,595	9,861	10,500	10,580	11,030	14,024	15,972
15 to 19 years	6,815	9,088	9,694	10,555	10,634	11,084	14,065
20 to 24 years	5,560	7,064	8,711	9,741	10,596	10,674	11,122
14 years and over	62,208	68,198	72,699	78,764	84,249	90,986	100,195
18 years and over	56,529	60,930	64,672	70,179	76,089	81,294	88,423
21 years and over	52,853	55,829	59,167	63,953	69,567	75,260	80,570
Series B							
All ages	89,332	96,900	101,882	109,879	119,510	130,129	141,100
Under 5 years	10,352	10,135	10,228	12,437	14,290	15,494	16,094
5 to 9 years	9,572	10,580	10,507	10,303	12,504	14,350	15,551
10 to 14 years	8,595	9,861	10,500	10,580	10,376	12,573	14,415
15 to 19 years	6,815	9,088	9,694	10,555	10,634	10,433	12,620
20 to 24 years	5,560	7,064	8,711	9,741	10,596	10,674	10,475
14 years and over	62,208	68,198	72,699	78,764	84,249	90,070	97,792
18 years and over	56,529	60,930	64,672	70,179	76,089	81,193	87,234
21 years and over	52,853	55,829	59,167	63,953	69,567	75,260	80,147
Series C							
All ages	89,332	96,900	101,225	107,622	115,386	124,137	133,073
Under 5 years	10,352	10,135	9,571	10,835	12,413	13,614	14,034
5 to 9 years	9,572	10,580	10,507	9,649	10,908	12,481	13,679
10 to 14 years	8,595	9,861	10,500	10,580	9,724	10,980	12,550
15 to 19 years	6,815	9,088	9,694	10,555	10,634	9,783	11,034
20 to 24 years	5,560	7,064	8,711	9,741	10,596	10,674	9,830
14 years and over	62,208	68,198	72,699	78,764	84,249	89,144	95,198
18 years and over	56,529	60,930	64,672	70,179	76,089	81,100	86,015
21 years and over	52,853	55,829	59,167	63,953	69,567	75,260	79,731
Series D							
All ages	89,332	96,900	100,656	105,581	111,533	118,450	125,518
Under 5 years	10,352	10,135	9,002	9,360	10,594	11,768	12,146
5 to 9 years	9,572	10,580	10,507	9,083	9,440	10,669	11,840
10 to 14 years	8,595	9,861	10,500	10,580	9,159	9,515	10,742
15 to 19 years	6,815	9,088	9,694	10,555	10,634	9,220	9,575
20 to 24 years	5,560	7,064	8,711	9,741	10,596	10,674	9,271
14 years and over	62,208	68,198	72,699	78,764	84,249	88,337	92,833
18 years and over	56,529	60,930	64,672	70,179	76,089	81,022	84,943
21 years and over	52,853	55,829	59,167	63,953	69,567	15,260	79,375
All Series—25 Years Old and Over							
25 to 29 years	5,423	5,770	6,935	8,758	9,779	10,626	10,705
30 to 34 years	5,901	5,429	5,674	6,971	8,778	9,792	10,633
35 to 39 years	6,140	5,801	5,464	5,674	6,959	8,748	9,753
40 to 44 years	5,733	6.064	5,825	5,408	5,617	6,882	8,645
45 to 49 years	5,384	5,658	5,919	5,684	5,282	5,489	6,725
50 to 54 years	4,758	5,197	5,344	5,663	5,444	5,065	5,269
55 to 59 years	4,143	4,491	4,789	4,974	5,278	5,081	4,735
60 to 64 years	3,418	3,757	3,957	4,293	4,467	4,747	4,577
65 to 69 years	2,929	2,901	3,123	3,341	3,635	3,794	4,043
70 to 74 years	2,195	2,261	2,230	2,439	2,624	2,869	3,011
75 years and over	2,413	2,841	2,983	3,056	3,248	3,512	3,850

See footnotes at end of table.

Appendix Table 15 (continued)

ESTIMATES AND PROJECTIONS OF THE TOTAL POPULATION OF THE UNITED STATES, BY AGE AND SEX: 1960 TO 1990--Continued

(In thousands. Figures relate to July 1 and include Armed Forces abroad. For an explanation of the assumptions underlying the four series of projections, see text. Figures inside heavy lines represent, in whole or part, survivors of births projected for years after 1966)

Series, age, and sex	1960[1]	1966[2]	1970	1975	1980	1985	1990
FEMALE							
Series A							
All ages	91,352	99,942	106,075	115,935	127,304	139,443	152,075
Under 5 years	10,013	9,715	10,430	13,312	15,183	16,280	17,122
5 to 9 years	9,254	10,226	10,085	10,510	13,383	15,249	16,344
10 to 14 years	8,314	9,542	10,169	10,161	10,586	13,454	15,318
15 to 19 years	6,652	8,807	9,407	10,252	10,245	10,669	13,532
20 to 24 years	5,556	6,983	8,551	9,558	10,401	10,394	10,817
14 years and over	65,127	72,268	77,376	84,072	89,985	96,977	106,231
18 years and over	59,594	65,237	69,595	75,761	82,139	87,663	94,923
21 years and over	55,983	60,271	64,246	69,703	75,821	81,836	87,346
Series B							
All ages	91,352	99,942	105,444	113,907	123,781	134,479	145,400
Under 5 years	10,013	9,715	9,799	11,912	13,682	14,831	15,399
5 to 9 years	9,254	10,226	10,085	9,881	11,988	13,753	14,899
10 to 14 years	8,314	9,542	10,169	10,161	9,958	12,062	13,824
15 to 19 years	6,652	8,807	9,407	10,252	10,245	10,042	12,142
20 to 24 years	5,556	6,983	8,551	9,558	10,401	10,394	10,193
14 years and over	65,127	72,268	77,376	84,072	89,985	96,096	103,918
18 years and over	59,594	65,237	69,595	75,761	82,139	87,566	93,776
21 years and over	55,983	60,271	64,246	69,703	75,821	81,836	86,937
Series C							
All ages	91,352	99,942	104,814	111,743	119,826	128,734	137,697
Under 5 years	10,013	9,715	9,169	10,376	11,885	13,031	13,428
5 to 9 years	9,254	10,226	10,085	9,254	10,458	11,962	13,105
10 to 14 years	8,314	9,542	10,169	10,161	9,332	10,534	12,035
15 to 19 years	6,652	8,807	9,407	10,252	10,245	9,417	10,617
20 to 24 years	5,556	6,983	8,551	9,558	10,401	10,394	9,570
14 years and over	65,127	72,268	77,376	84,072	89,985	95,207	101,421
18 years and over	59,594	65,237	69,595	75,761	82,139	87,476	92,601
21 years and over	55,983	60,271	64,246	69,703	75,821	81,836	86,535
Series D							
All ages	91,352	99,942	104,268	109,787	116,133	123,280	130,449
Under 5 years	10,013	9,715	8,623	8,963	10,142	11,262	11,620
5 to 9 years	9,254	10,226	10,085	8,710	9,049	10,225	11,342
10 to 14 years	8,314	9,542	10,169	10,161	8,789	9,128	10,301
15 to 19 years	6,652	8,807	9,407	10,252	10,245	8,876	9,214
20 to 24 years	5,556	6,983	8,551	9,558	10,401	10,394	9,030
14 years and over	65,127	72,268	77,376	84,072	89,985	94,431	99,145
18 years and over	59,594	65,237	69,595	75,761	82,139	87,402	91,566
21 years and over	55,983	60,271	64,246	69,703	75,821	81,836	86,191
All Series--25 Years Old and Over							
25 to 29 years	5,510	5,841	6,943	8,692	9,696	10,537	10,530
30 to 34 years	6,077	5,527	5,763	7,003	8,744	9,745	10,582
35 to 39 years	6,402	5,988	5,597	5,789	7,022	8,753	9,748
40 to 44 years	5,948	6,372	6,075	5,587	5,779	7,001	8,717
45 to 49 years	5,541	5,978	6,304	6,008	5,531	5,723	6,928
50 to 54 years	4,896	5,498	5,759	6,177	5,891	5,428	5,620
55 to 59 years	4,322	4,839	5,250	5,578	5,984	5,713	5,271
60 to 64 years	3,744	4,174	4,494	4,986	5,303	5,695	5,444
65 to 69 years	3,335	3,476	3,760	4,129	4,588	4,887	5,256
70 to 74 years	2,574	2,929	2,984	3,281	3,611	4,020	4,292
75 years and over	3,212	4,047	4,505	4,913	5,358	5,896	6,554

[1] Estimates previously published in Current Population Reports, Series P-25, No. 321.
[2] Estimates previously published in Current Population Reports, Series P-25, No. 352.

Source: Projections of the Population of the United States, by Age, Sex and Color to 1990, with Extensions of Total Population to 2015 (Table 4). Current Population Reports, Population Estimates, Series P-25, No. 359, February 20, 1967. U.S. Department of Commerce, Bureau of the Census.

Appendix 16

Assumptions and Methodology for Obtaining Projections of Manpower Needs and Demands for Service

Based on Projections of Outpatient Psychiatric Clinic and Public Mental Hospital Data

Assumptions:

1. Rate of increase in the number of children served in clinics and hospitals will continue as it has in the past.

2. The same proportion of core professionals will work in psychiatric facilities in 1972 as in 1965.

3. The amount of time spent to provide service to children is the same as that given to an adult.

Assumption 1. Rate of increase in the number of children under 18 years of age served in outpatient clinics and hospitals will continue as it has in the past.

Outpatient Psychiatric Clinics

a.	Average annual rate of change, children served in clinics.	
	1959-1966 7.9% per year	
b.	Expected number of children in general population in 1972 (Population Projections, B Series)	74,973,000
c.	Expected rate per 100,000 population under 18 years, 1972	892.5
d.	Expected number of children to be served in clinics in 1972	669,000
e.	Expected number of children to be served in clinics in 1975	873,000

(1975 rate = 1,121.2)
(1975 expected population under 18 years, B series = 77,845,000)

Public Mental Hospitals

a.	Average annual rate of change, children resident in public mental hospitals in 1953-1963[1]	16%
b.	Expected number of children to be served in public mental hospitals in 1972	66,000
c.	Expected number of children to be served in public mental hospitals in 1975	103,000

Public mental hospital and other hospital population in 1975	247,000
Total persons to be served in 1975 (hospitals and clinics)	1,120,000

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[1] Source: Some Implications of Trends in the Usage of Psychiatric Facilities for Community Mental Health Programs and Related Research by M. Kramer. PHS Publication 1434, U.S. Government Printing Office, Washington, D. C., 1966.

Assumption 2. **Same proportion of core professionals will work in psychiatric facilities in 1972 as in 1965.**

a. **Mental Health Professional Staff - 1965**

Type of Staff	Outpatient Psychiatric Clinics (Full-time equivalent)	Public Mental Hospitals (Full-time)
Psychiatrists	3,813	3,224
Psychologists	2,731	1,813
Social Workers	4,622	3,653
Nurses	328	18,022

b. **Mental Health Professional Staff**

	Employed in 1965			Projections for 1972	
Type of Staff	Number in Clinics and Hospitals	Total Number in U.S. 1/	Percent in Clinics and Hospitals	Total Number in U.S. 2/	Number in Clinics and Hospitals
	(1)	(2)	(3)=(1)/(2)	(4)	(5)=(3).(4)
Psychiatrists	7,037	18,750	37.5	26,169	9,813
Psychologists	4,544	13,265	34.3	23,536	8,073
Social Workers	8,275	11,378	72.7	20,561	14,948
Nurses	18,350	20,554	89.3	29,187	26,064
Total[3]	38,206				58,898

1/ Source: Mental Health Training and Manpower, 1968-1972 (Table 1). Division of Manpower and Training Programs, NIMH, April 1967.

2/ Source: Mental Health Training and Manpower, 1968-1972 (Table 8). Division of Manpower and Training Programs, NIMH, April 1967.

3/ Total mental health "core" professionals in clinics and public mental hospitals, (full-time equivalent).

Appendix 16 (continued)

Assumption 3. The amount of time spent to provide service to children is the same as that given to an adult.

a.

	Number of Professionals in 1965	Percent of Children in Facilities	Number of Professionals Serving Children in 1965
Mental Health Core Manpower:			
In clinics	11,494	35%	4,023
In public mental hospitals	26,712	3.4%	908
Total	38,206		4,931

b. Percent of time for children in 1965 4,931/38,206 = 13%

c. Number of mental health professionals in 1972 = 7,657 (58,898 . 13%)

d. Ratio: Number of Children Served / Manpower, 1965

$$\frac{384{,}000 \text{ (in clinics in 1965)} + 27{,}000 \text{ (in mental hospitals in 1965)}}{4{,}931}$$

$$= \frac{411{,}000}{4{,}931} = 83.4$$

1 Mental Health Core Professional for 83 children in 1965

THEREFORE:

If (1) 735,000 children are expected to seek service in 1972 (Assumption 1) and (2) 1 professional for 83 children is needed to maintain current quality of service (Assumption 3)

(3) then 8,855 professionals are needed in 1972 just to maintain status quo (statements (1) and (2).

(4) We can expect to have 7,657 professionals (Assumptions 2b and 3c) in 1972. Hence, we will be 14% short of current levels of service.

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